ASRS Database Report Set

Wake Turbulence Encounters

Report Set Description...........................................A sampling of reports from flight crews encountering, or affected by, turbojet wake turbulence.

Update Number.....................................................8.0

Date of Update ..................................................December 6, 2002

Number of Records in Report Set.......................50

Number of New Records in Report Set ..............25

Type of Records in Report Set..............................For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.
MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

The attached material is furnished pursuant to a request for data from the NASA Aviation Safety Reporting System (ASRS). Recipients of this material are reminded of the following points, which must be considered when evaluating these data.

ASRS reports are submitted voluntarily. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

Reports submitted to ASRS may be amplified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information may or may not be correct in any or all respects. At best, it represents the perception of a specific individual who may or may not understand all of the factors involved in a given issue or event.

After preliminary processing, all ASRS reports are de-identified. Following de-identification, there is no way to identify the individual who submitted a report. All ASRS report processing systems are designed to protect identifying information submitted by reports, such as, names, company affiliations, and specific times of incident occurrence. There is, therefore, no way to verify information submitted in an ASRS report after it has been de-identified.

The National Aeronautics and Space Administration and its ASRS contractor, Battelle Memorial Institute, specifically disclaim any responsibility for any interpretation which may be made by others of any material or data furnished by NASA in response to queries of the ASRS database and related materials.

Linda J. Connell

Linda J. Connell, Director
Aviation Safety Reporting System
CAVEAT REGARDING STATISTICAL USE OF ASRS INFORMATION

Certain caveats apply to the use of ASRS statistical data. All ASRS reports are voluntarily submitted, and thus cannot be considered a measured random sample of the full population of like events. For example, we receive several thousand altitude deviation reports each year. This number may comprise over half of all the altitude deviations that occur, or it may be just a small fraction of total occurrences.

Moreover, not all pilots, controllers, air carriers, or other participants in the aviation system, are equally aware of the ASRS or equally willing to report to us. Thus, the data reflect reporting biases. These biases, which are not fully known or measurable, may influence ASRS statistics. A safety problem such as near midair collisions (NMACs) may appear to be more highly concentrated in area “A” than area “B” simply because the airmen who operate in area “A” are more supportive of the ASRS program and more inclined to report to us should an NMAC occur.

One thing that can be known from ASRS statistics is that they represent the lower measure of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 1999 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 1999.

Because of these statistical limitations, we believe that the real power of ASRS lies in the report narratives. Here pilots, controllers, and others, tell us about aviation safety incidents and situations in detail. They explain what happened, and more importantly, why it happened. The values of these narrative reports lie in their qualitative nature. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.
ANOMALY DEFINITIONS

AIRCRAFT EQUIPMENT PROBLEM : CRITICAL  Aircraft equipment problem that is vital to the safety of the flight.

AIRCRAFT EQUIPMENT PROBLEM : LESS SEVERE  Not qualifying as a critical aircraft equipment problem.

AIRSPACE VIOLATION : ENTRY  As explained in FAR PART 91.

AIRSPACE VIOLATION : EXIT  As explained in FAR PART 91.

ALTITUDE DEVIATION  A departure from or failure to attain or failure to maintain an ATC assigned altitude. It does not include an injudicious or illegal altitude in VFR flight where no altitude has been assigned by ATC or specified in pertinent charts. An aircraft climbs or descends through the assigned altitude.

ALTITUDE DEVIATION : UNDERSHOOT  An aircraft fails to reach an assigned altitude during climb or descent.

ALTITUDE DEVIATION : OVERSHEET  An aircraft passes an assigned altitude during climb or descent.

ALTITUDE DEVIATION : EXCURSION FROM ASSIGNED ALTITUDE  An aircraft departs from level flight at an assigned altitude.

ALTITUDE DEVIATION : CROSSING RESTRICTION NOT MET  Charted or assigned altitude crossing restriction not met.

OTHER SPATIAL DEVIATION : ALTITUDE HEADING RULE DEVIATION  Altitude does not match heading flown as specified in FAR 91.159.

OTHER SPATIAL DEVIATION : CONTROLLED FLIGHT TOWARDS TERRAIN  Flying at an altitude that would, if continued, result in contact with terrain.

OTHER SPATIAL DEVIATION : TRACK OR HEADING DEVIATION  Failure to fly planned or assigned heading/track.

GROUND EXCURSION : RAMP  An aircraft exits the ramp pavement.

GROUND EXCURSION : RUNWAY  An aircraft exits the runway pavement.

GROUND EXCURSION : TAXIWAY  An aircraft exits the taxiway pavement.

GROUND INCURSION : TAXIWAY  The erroneous or improper occupation of a taxiway or its immediate environs by an aircraft or other vehicle so as to pose a potential collision hazard to other aircraft using the taxiway, even if no such aircraft were actually present.

GROUND INCURSION : LANDING WITHOUT CLEARANCE  A runway incursion specifically involving landing without a landing clearance or landing on the wrong runway.

GROUND INCURSION : RUNWAY  The erroneous or improper occupation of a runway or its immediate environs by an aircraft or other vehicle so as to pose a potential collision hazard to other aircraft using the runway, even if no such aircraft were actually present.

GROUND ENCOUNTERS : ANIMAL  An encounter with an animal while the aircraft is on the ground

GROUND ENCOUNTERS : FOD  An encounter with any foreign objects while the aircraft is on the ground

GROUND ENCOUNTERS : PERSON  An encounter with a person while the aircraft is on the ground

GROUND ENCOUNTERS : VEHICLE  An encounter with a vehicle while the aircraft is on the ground

GROUND ENCOUNTERS : GEAR UP LANDING  A landing performed with the aircraft gear up, whether mechanically failed or left up inadvertently.

CONFLICT : NMAC (NEAR MIDAIR COLLISION)  A conflict is defined as the existence of a perceived separation anomaly such that the pilot(s) of one or both aircraft take evasive action; or are advised by ATC to take evasive action; or experience doubt about assurance of continuing separation from the viewpoint of one or more of the pilots or controllers involved. A near midair collision is when the flight crew reports, either directly or as quoted by the controller, that the reported miss distance is less than 500 feet.

CONFLICT : AIRBORNE, LESS SEVERE  A conflict not qualifying as an NMAC.

CONFLICT : GROUND, CRITICAL  A ground occurrence that involves two or more aircraft, at least one of which is on the ground at the time of the occurrence. The flight crew reports, either directly or as quoted by a controller, that they took evasive action to avoid a collision (emergency action go around, veering on runway or taxiway, takeoff abort, or emergency braking), and the balance of the report, including the narrative is judged consistent with a critical occurrence.
CONFLICT: GROUND, LESS SEVERE  A ground conflict not qualifying as critical.

IN-FLIGHT ENCOUNTER: BIRDS  In-flight encounter with a bird or birds.

IN-FLIGHT ENCOUNTER: TURBULENCE  In-flight encounter with weather-related or clear air turbulence.

IN-FLIGHT ENCOUNTER: SKYDIVERS  In-flight encounter with one or more skydivers.

IN-FLIGHT ENCOUNTER: WAKE TURBULENCE  In-flight encounter with turbulence created by another aircraft.

IN-FLIGHT ENCOUNTER: WEATHER  In-flight encounter with weather (e.g., windshear, clouds, high winds, storms).

IN-FLIGHT ENCOUNTER: VFR IN IMC  Flight into IMC when not on an instrument flight plan and/or when not qualified.

IN-FLIGHT ENCOUNTER: OTHER  In-flight encounter with anything not included above.

VFR IN IMC  Flight into IMC when not on an instrument flight plan and/or when not qualified.

MAINTENANCE PROBLEM: IMPROPER MAINTENANCE  Maintenance performed contrary to procedures, or not performed at all.

MAINTENANCE PROBLEM: NON COMPLIANCE WITH MEL  Not following the MEL, or misinterpreting the MEL.

MAINTENANCE PROBLEM: IMPROPER DOCUMENTATION  Incorrectly or incompletely filling out aircraft log books, or not returning logs to the aircraft when complete.

CABIN EVENT: GALLEY FIRE  Fire emanating from the aircraft galley.

CABIN EVENT: PASSENGER MISCONDUCT  Any misconduct on the part of the passenger, including aggression, intoxication, or not following safety regulations.

CABIN EVENT: PASSENGER ILLNESS  Any passenger illness.

CABIN EVENT: PASSENGER CONTRABAND  Items carried by passengers that could constitute a safety hazard to the aircraft, crew, or other passengers, including weapons or hazardous materials. Also personal bottles of alcohol.

CABIN EVENT: OTHER  Any cabin event not specified above.

NON ADHERENCE: CLEARANCE  Non-adherence to an ATC clearance.

NON ADHERENCE: COMPANY POLICIES  Non-adherence to any policies or procedures required by the company operating the aircraft.

NON ADHERENCE: FAR  Non-adherence to a Federal Aviation Regulation.

NON ADHERENCE: PUBLISHED PROCEDURE  Non-adherence to approach procedure, standard instrument departure, STAR, profile descent, or operational procedure as described in the AIM or ATC facility handbook.

NON ADHERENCE: REQUIRED LEGAL SEPARATION  Less than legal separation between two airborne aircraft (as legal separation is defined for the airspace involved).

NON ADHERENCE: OTHER  Non-adherence to SOPs for aircraft, etc.

OTHER ANOMALY: LOSS OF AIRCRAFT CONTROL  Inability to control pitch, roll, and yaw as intended.

OTHER ANOMALY: UNSTABILIZED APPROACH

OTHER ANOMALY: SPEED DEVIATION  Aircraft speed contrary to FARs or controller instruction.

OTHER ANOMALY: SMOKE OR FIRE  Smoke or fire present in the aircraft, except in the galley.

OTHER ANOMALY: HAZARDOUS MATERIAL VIOLATION  Carriage of hazardous materials without proper procedures being followed.

OTHER ANOMALY: FUMES  Fumes of any origin present in the aircraft.
ACN: 511976

Time
Date: 200105
Day: Sat
Local Time Of Day: 0601 To 1200

Place
State Reference: NJ
Altitude.MSL.Single Value: 11000

Environment
Flight Conditions: Mixed
Ceiling.Single Value: 1500

Aircraft / 1
Operator.General Aviation: Corporate
Make Model: Beech Jet 400
Mission: Business
Flight Phase.Descent: Approach

Aircraft / 2
Controlling Facilities.TRACON: N90.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B747 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Descent: Approach

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 11300
Experience.Flight Time.Last 90 Days: 160
Experience.Flight Time.Type: 1900
ASRS Report: 511976

Person / 2
Function.Flight Crew: First Officer
Experience.Flight Time.Total: 9000
Experience.Flight Time.Last 90 Days: 90
Experience.Flight Time.Type: 350
ASRS Report: 511616

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Approach

Events
Anomaly.Other Spatial Deviation: Track Or Heading Deviation
Anomaly.Altitude Deviation: Excursion From Assigned Altitude
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Clearance
Anomaly.Other Anomaly: Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Flight Crew: Regained Aircraft Control
Resolutory Action.Flight Crew: Returned To Assigned Altitude
Resolutory Action.Flight Crew: Returned To Intended or Assigned Course
Consequence.FAA: Reviewed Incident With Flight Crew
Supplementary
Problem Areas: Aircraft
Problem Areas: Airspace Structure
Problem Areas: ATC Human Performance
Problem Areas: Flight Crew Human Performance
Narrative:
FLT ENCOUNTERED JET UPSET CAUSED BY WAKE TURB FOLLOWING A HVY B747 ON ARR INTO JFK ARPT. ON HDOF FROM ZDC TO ZNY AT FL290, APPROX 30 NM W OF SIE, ZNY ASKED WHAT OUR SPD WAS IN KTS. WE RESPONDED WITH 290 KTS AND INSTRUCTED TO REDUCE TO 280 KTS OR LESS AND DSN TO FL230. LISTENING TO THE OTHER XMISSIONS WE SAW WHAT ZNY WAS DOING, DSNING A B747 FROM FL340 ON A PARALLEL 10 MI COURSE TO PUT IN FRONT OF US GOING INTO JFK. WE WERE NEVER ADVISED THAT WE WERE FOLLOWING A HVY B747, BUT PNF AND I KNEW IT. WE WERE MONITORING OUR DISTANCE AND ALT FROM THE B747. WE WERE AVERAGING BETWEEN 10-15 MI HORIZ SEPARATION AND BECAME STEADY AT 10 MI SEPARATION APACHING THE CAMRN INTXN. PF WAS PIC, ACFT WAS ON AUTOPLT AND BEGAN TO ENCOUNTER SIGNS OF IMPENDING WAKE TURB. TO PREPARE TO REACT QUICKLY SHOULD THE TURB INCREASE IN INTENSITY, THE AUTOPLT WAS DISENGAGED. AT THAT POINT OF DISENGAGEMENT, THE AIRPLANE ROLLED TO THE R 100 DEGS AND PITCHED DOWN. IMMEDIATE OPPOSITE SPOILERON WAS USED TO STOP THE ROLL AND WINGS WERE RETURNED TO LEVEL AND PITCH DOWN TOPPED AT 400 FT BELOW OUR ASSIGNED ALT. THE AIRPLANE WAS AT 250 KTS AND 11000 FT WHEN THE UPSET OCCURRED. THE AIRPLANE LOST 400 FT IN ALT AND OFF HDG 30 DEGS. RECOVERY WAS BACK TO ALT AND OFF HDG UNTIL ATC WAS ADVISED OF OUR DEVS DUE TO SEVERE WAKE TURB FOLLOWING THE B747. WE DID NOT EXCEED ANY LIMITATIONS ON THE AIRPLANE AT ANY TIME DURING THIS EVENT. WE CONTINUED ON TO AN ILS RWY 22L APCH TO JFK UNDER NORMAL FLT CONDITIONS. ON LNDG AT JFK, CREW CALLED ZNY, SPEAKING TO SUPVR, TO VERIFY OUR ALTDEV UNTIL WE WERE UNDER CTL. HE THANKED US FOR CALLING TO CONFIRM THAT DEV AND HE CONFIRMED THAT IT WAS NOT A PROB WITH THE ALT LOSS.

Synopsis:
AT 11000 FT, A BEECH JET 400 FLC RECOVERS FROM A WAKE ENCOUNTER BEHIND A B747, 2 NM S OF CAMRN, NJ.
ACN: 513397

Time
Date: 200106
Day: Sun
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: MIA.Airport
State Reference: FL
Altitude.AGL.Single Value: 0
Altitude.AGL.Bound Upper: 150

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.Tower: MIA.Tower
Operator.Common Carrier: Air Carrier
Make Model: B727 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Descent: Approach
Flight Phase.Landing: Roll
Route In Use.Approach: Instrument Precision

Aircraft / 2
Controlling Facilities.Tower: MIA.Tower
Operator.Common Carrier: Air Carrier
Make Model: B747 Undifferentiated or Other Model
Flight Phase.Ground: Takeoff Roll
Flight Phase.Climbout: Initial

Aircraft / 3
Operator.Common Carrier: Air Carrier
Make Model: Commercial Fixed Wing
Mission: Passenger
Flight Phase.Ground: Holding

Aircraft / 4
Controlling Facilities.Tower: MIA.Tower
Operator.Common Carrier: Air Carrier
Make Model: A300
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Flight Phase.Landing: Roll
Route In Use.Approach: Instrument Precision

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
ASRS Report: 513397

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Controller: Local

Person / 4
Function.Oversight: PIC
Function.Flight Crew: Captain
Person / 6
  Function.Oversight : PIC
  Function.Flight Crew : Captain

Person / 7
  Function.Controller : Local

Person / 5
  Function.Oversight : PIC
  Function.Flight Crew : Captain

Person / 8
  Function.Controller : Supervisor

Events
  Anomaly.Inflight Encounter : Turbulence
  Anomaly.Inflight Encounter : Wake Turbulence
  Anomaly.Non Adherence : Published Procedure
  Independent Detector.Other.Flight CrewA : 1
  Independent Detector.Other.Flight CrewB : 5
  Resolutory Action.None Taken : Unable
  Consequence.FAA : Reviewed Incident With Flight Crew
  Consequence.Other : Company Review

Supplementary
  Problem Areas : ATC Facility
  Problem Areas : ATC Human Performance
  Problem Areas : Flight Crew Human Performance
Narrative:

Synopsis:
AN ACR PLT QUESTIONS THE NEED TO SPACE TFC SO CLOSELY THAT THE POTENTIAL FOR SAFE OP IS COMPROMISED.
Time
Date : 200106
Day : Sun
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : FWA.Airport
State Reference : IN
Altitude.AGL.Single Value : 3

Environment
Flight Conditions : VMC
Ceiling.Single Value : 2400

Aircraft / 1
Controlling Facilities.Tower : FWA.Tower
Operator.General Aviation : Instructional
Make Model : Cessna 152
Mission : Training
Flight Phase.Climbout : Takeoff

Aircraft / 2
Controlling Facilities.Tower : FWA.Tower
Operator.General Aviation : Personal
Make Model : Talon
Mission : Pleasure
Flight Phase.Landing : Go Around

Person / 1
Function.Instruction : Instructor
Experience.Flight Time.Total : 850
Experience.Flight Time.Last 90 Days : 176
Experience.Flight Time.Type : 110
ASRS Report : 513605

Person / 2
Function.Instruction : Trainee

Person / 3
Function.Flight Crew : Single Pilot

Person / 4
Function.Controller : Local

Events
Anomaly.Conflict : NMAC
Anomaly.Inflight Encounter : Wake Turbulence
Anomaly.Non Adherence : Clearance
Anomaly.Non Adherence : FAR
Anomaly.Non Adherence : Required Legal Separation
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Exited Adverse Environment
Resolutory Action.Flight Crew : Took Evasive Action
Consequence.FAA : Reviewed Incident With Flight Crew
Consequence.Other : Emotional Trauma

Supplementary
Problem Areas : ATC Human Performance
Problem Areas : Flight Crew Human Performance
Narrative:
A C152 WAS IN R TFC FOR TOUCH AND GOES. A T38 WAS IN L TFC FOR WHAT APPEARED TO BE PERFORMING LOW APOCHS AND WAS PERFORMING OTHER MIL MANEUVERS. THE C152 WAS CLRED FOR TOUCH AND GO AND THE T38 WAS #2 TO FOLLOW FOR TOUCH AND GO. THE C152 WAS ROLLING AND AT ROTATION WHILE THE T38, 2 SECONDS LATER, 'BUZZED' THE C152 WHILE STILL OVER THE L SIDE OF THE RWY (THE T38 WAS STILL OVER THE ACTIVE RWY WITHIN THE RWY EDGE MARKINGS). THE C152 WAS AFFECTED BY THE T38'S WAKE AND WAS ABLE TO CLB TO THE R AS TO CLR ANY FURTHER WAKE TURB. THE CTL TWR SAID AND DID NOTHING AS THIS WAS NORMAL SAFE PRACTICE. THIS OCCURRED ON THE PORTION OF THE RWY NEAREST TO THE CTL TWR AND 60% OF THE LENGTH DOWN THE RWY. MY IMPRESSION WAS THAT THE T38 DID THIS 'BUZZ JOB' INTENTIONALLY AT THE RISK OF INSTRUCTOR AND STUDENT IN A LESS MANEUVERABLE ACFT. THE C152 DID NOT RPT THIS ON FREQ DUE TO SHOCK BUT DID RPT THIS EVENT TO THE TWR VIA PHONE AND THE FSDO VIA PHONE.

Synopsis:
A C152 INSTRUCTOR PLT AND STUDENT EXPERIENCE AN NMAC WHEN A T38 ON A GAR BUZZES THEIR ACFT AT 3 FT ABOVE THE RWY AT FWA, IN.
**Time**
Date: 200106
Day: Thu
Local Time Of Day: 0601 To 1200

**Place**
Locale Reference: Airport: LAX.Airport
State Reference: CA
Altitude MSL: Single Value: 22000

**Environment**
Flight Conditions: VMC

**Aircraft / 1**
Controlling Facilities: ARTCC: ZLA.ARTCC
Operator: Common Carrier: Air Carrier
Make Model: B737-300
Mission: Passenger
Navigation In Use: Other: FMS or FMC
Route In Use: Arrival: On Vectors

**Aircraft / 2**
Controlling Facilities: ARTCC: ZLA.ARTCC
Operator: Common Carrier: Air Carrier
Make Model: B747-400
Mission: Passenger
Navigation In Use: Other: FMS or FMC

**Person / 1**
Function: Flight Crew: First Officer
Experience: Flight Time: Total: 4400
Experience: Flight Time: Last 90 Days: 160
Experience: Flight Time: Type: 400
ASRS Report: 516160

**Person / 2**
Function: Oversight: PIC
Function: Flight Crew: Captain

**Person / 3**
Function: Oversight: PIC
Function: Flight Crew: Captain

**Person / 4**
Function: Oversight: Flight Attendant In Charge

**Person / 5**
Function: Controller: Radar

**Events**
Anomaly: Inflight Encounter: Wake Turbulence
Independent Detector: Aircraft Equipment: TCAS
Independent Detector: Other: Flight Crew A: 1
Independent Detector: Other: Flight Crew B: 2
Resolutory Action: None Taken: Detected After The Fact
Consequence: FAA: Reviewed Incident With Flight Crew
Consequence: Other: Physical Injury

**Supplementary**
Problem Areas: ATC Human Performance
Problem Areas: Cabin Crew Human Performance
Problem Areas : Environmental Factor

Narrative:
WE WERE ON THE SADDE 6 ARR INTO LAX WHEN ATC STARTED GIVING US VECTORS AROUND THE COURSE FOR SEPARATION. I WAS THE PF, AND DID NOT SEE ANYONE OUT IN FRONT OF US, BUT DID SEE A TARGET ROUGHLY 8 MI AHEAD OF US ON TCASII. WE WERE NEVER ADVISED THAT IT WAS A HVY JET. WE HAD SEATED THE PAX, BUT THE FLT ATTENDANTS WERE UP WHEN WE HIT THE B747'S WAKE TURB. THE CAPT IMMEDIATELY CONTACTED THE CABIN TO MAKE SURE EVERYONE WAS ALRIGHT WHILE I CONTACTED ATC TO FIND OUT WHAT TYPE ACFT WE WERE FOLLOWING. THE FLT ATTENDANTS RPTED THAT EVERYTHING IN THE CABIN WAS OK EXCEPT FOR 2 SEAT CUSHIONS WHICH HAD SPILLED TOMATO JUICE ALL OVER THEM. WHEN I QUESTIONED ATC AS TO WHO WE WERE FOLLOWING, THE CTR CTLR WAS EXTREMELY RUDE AND MADE ME REPEAT MY QUESTION 3 TIMES BEFORE TELLING US IT WAS A HVY JET. I BELIEVE THAT HE HAD LOST SEPARATION AND WAS AVOIDING STATING THAT FACT. ON THE GND, OUR PURSER COMPLAINED OF NECK PAIN AND WAS ULTIMATELY REMOVED FROM THE TRIP. I BELIEVE THAT IF THE CTLR HAD INITIALLY TOLD US WE WERE FOLLOWING A HVY, I WOULD HAVE BEEN ABLE TO ADJUST MY FLT PATH ON THE DSCNT TO AVOID THIS SIT. THANKFULLY, WE DID NOT HAVE ANY PAX STANDING, AS I THINK MORE PEOPLE WOULD HAVE BEEN INJURED DURING THIS INCIDENT.

Synopsis:
WAKE TURB FROM B747 INJURES A CABIN ATTENDANT ON B737 DURING A STAR ARR INTO LAX.
ACN: 516628

Time
Date : 200106
Day : Sat
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : ABQ.Airport
State Reference : NM
Altitude.AGL.Single Value : 1000

Environment
Flight Conditions : VMC
Ceiling : CLR

Aircraft / 1
Controlling Facilities.TRACON : ABQ.TRACON
Operator.General Aviation : Instructional
Make Model : Small Transport, Low Wing, 2 Recip Eng
Mission : Training
Flight Phase.Descent : Approach
Route In Use.Approach : Instrument Precision

Person / 1
Function.Oversight : PIC
Function.Instruction : Instructor
Function.Flight Crew : Captain
Experience.Flight Time.Total : 3600
Experience.Flight Time.Last 90 Days : 145
Experience.Flight Time.Type : 500
ASRS Report : 516628

Person / 2
Function.Instruction : Trainee
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Approach

Person / 4
Function.Oversight : Supervisor
Function.Controller : Approach

Person / 5
Function.Maintenance : Technician

Events
Anomaly.Other Spatial Deviation : Track Or Heading Deviation
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Conflict : Airborne Less Severe
Anomaly.Inflight Encounter : Wake Turbulence
Anomaly.Non Adherence : Published Procedure
Anomaly.Non Adherence : Required Legal Separation
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.ControllerA : 3
Independent Detector.Other.Flight CrewA : 1
Resolutory Action.Flight Crew : Exited Adverse Environment
Resolutory Action.Flight Crew : Landed As Precaution
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Flight Crew : Took Evasive Action
Consequence.FAA : Investigated
Consequence.FAA : Reviewed Incident With Flight Crew

**Supplementary**

Problem Areas : Aircraft
Problem Areas : Airspace Structure
Problem Areas : ATC Human Performance
Problem Areas : Environmental Factor
Problem Areas : Flight Crew Human Performance
Narrative:
WHILE DOING A PRACTICE ILS APCH, WE WERE VECTORED CLOSE BEHIND A B737. I WAS CONCERNED, BUT THE OTHER ACFT WAS FASTER AND WE WERE 2 MI IN TRAIL, BUT BELOW ITS FLT PATH. WITHOUT WARNING, WE ROLLED L VIOLENTLY. I ELECTED TO CONTINUE THE ROLL ALL THE WAY THROUGH. WE LOST ABOUT 400 FT. NO DAMAGE TO OUR PLANE, WE BROKE OFF THE APCH. TWR ASKED IF WE WERE OK. WE SAID ‘STAND BY.’ THEN AFTER OUR ACFT SEEMED TO FLY OK, WE CAME AROUND AND ASKED TO CONTINUE THE APCH TO A FULL STOP. 2 MECHS INSPECTED OUR ACFT AND SAID IT SHOWED NO SIGNS OF STRUCTURAL DAMAGE. WE CALLED THE TWR SUPVR AND DISCUSSED THE INCIDENT. HE SAID HE WOULD ALERT HIS CTLRS TO SPACING ISSUES. WE MIGHT HAVE REFUSED THE VECTOR, BUT THE SPACING SEEMED OK. HOWEVER, EVEN A B737 CAN MAKE A BIG WAKE, AND WE WERE BELOW HIS HIGH APCH PATH. THE UPSET OCCURRED WITH NO WARNING AND COULD NOT BE STOPPED.

Synopsis:
CPR TWIN ENG TRAINING FLC ENCOUNTER A FULL ROLL WAKE FROM PRECEDING B737 AFTER TURNING FINAL AT ABQ.
ACN: 519261

Time
Date: 200107
Day: Tue
Local Time of Day: 0001 to 0600

Place
Locale Reference.Airport: SEA.Airport
State Reference: WA
Altitude.MSL.Single Value: 1200

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.TRACON: S46.TRACON
Controlling Facilities.Tower: SEA.Tower
Operator.Common Carrier: Air Carrier
Make Model: A320
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Approach: Instrument Precision

Aircraft / 2
Controlling Facilities.Tower: SEA.Tower
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Descent: Approach

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 8500
Experience.Flight Time.Last 90 Days: 160
Experience.Flight Time.Type: 698
ASRS Report: 519261

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Approach

Person / 6
Function.Controller: Supervisor

Person / 5
Function.Controller: Local

Events
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Published Procedure
Anomaly.Other Anomaly: Loss Of Aircraft Control
Anomaly.Other Anomaly: Unstabilized Approach
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Flight Crew: Became Reoriented
Resolutory Action. Flight Crew: Regained Aircraft Control
Resolutory Action. Flight Crew: Took Evasive Action
Resolutory Action. Controller: Issued Advisory
Consequence. FAA: Reviewed Incident With Flight Crew
Consequence. Other: Company Review

Supplementary
Problem Areas: Aircraft
Problem Areas: Airport
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
INBND TO KSEA AT XA:40Z ON FLT TO SEA. ATIS WAS RPTING MALL VISUAL TO RWY 34L/R, AT APPROX 4000 FT, TURNING BASE, ATC ADVISED US THAT WE WERE FOLLOWING A 757 AT OUR 10 O'CLOCK POS 5 MILES, IF WE HAD HIM AND THE ARPT INSIGHT, WE WERE CLRED FOR THE VISUAL 34R, THE 757 WAS GOING TO THE LEFT, AND CONTACT TWR. AT APPROX 1200 FT AGL, WE ENCOUNTERED WAKE TURBULENCE FROM THE 757 WITH APPROX 30 BANK AND A PITCH UP ALONG WITH A SPEED WARNING. WE THAN REALIZED THAT THE STAGGERED RWY FOR 34R PUT US RIGHT IN THE WAKE OF THE 757. OUR GLIDE PATH WITH THE STAGGERED THRESHOLD HAD TO BE BELOW THE 757. WE FLEW THE REST OF THE APCH A LITTLE HIGH AND LANDED SAFELY. UPON ARRIVING AT THE GATE, I CALLED THE TOWER CTLR TO RPT THE WAKE TURBULENCE AND COMMENT ON THE PRACTICE OF PUTTING A SMALL ACFT ON THE RIGHT RWY WITH THE STAGGERED RWY AND HEAVY ON THE L. HE SAID THAT HE IS AWARE OF THIS TYPE OF PROB AND HE HAS TOLD THEM NOT TO DO THIS, BUT WOULD TALK TO THEM AGAIN. I FEEL THAT THIS IS A VERY UNSAFE PRACTICE AND WITHOUT THE QUICK RESPONSE BY MY CO-PLT AND MYSELF, THIS COULD HAVE BEEN A VERY SERIOUS SIT. I THINK THAT THIS HAZARDOUS PRACTICE SHOULD BE ADDRESSED AT A HIGHER LEVEL BEFORE SOMEBODY HAS A SERIOUS ACCIDENT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR ADVISED THAT HE IS SCHEDULED TO FLY ONLY ONCE OR TWICE A MONTH INTO SEA. UNTIL THIS INCIDENT, HE HAD NOT ENCOUNTERED THE OFFSET RWY CONFIG SIT WITH A HEAVY JET. ONLY AFTER THE WAKE TURBULENCE ENCOUNTER DID HE AND HIS FO FULLY RECOGNIZE THE POTENTIAL HAZARD WITH RWY 34L BEING FURTHER FORWARD FROM RWY 34R BY 2500 FT AND APPROX 600 FT, RWY EDGE RWY EDGE. THE RPTR EXPRESSED HIS FURTHER CONCERN OF BEING TOLD BY THE TOWER SUPVR THAT APCH CTL WAS NOTIFIED THAT TYPE OF SEQUENCING PROC WAS NOT CORRECT. RPTR ADVISED THAT HE HAD HEIGHTENED AWARENESS AND BRIEF HIS CREW ABOUT OTHER SIMILAR ARPTS WITH OFFSET RWYS THAT HIS COMPANY SERVICES.

Synopsis:
A320 FLIGHT ON VISUAL APCH TO SEA RWY 34R ENCOUNTERS WAKE TURBULENCE FROM A B757 ON APCH TO RWY 34L.
ACN: 520900

Time
Date: 200108
Day: Sat
Local Time Of Day: 0601 To 1200

Place
Locale Reference.Airport: ATL.Airport
State Reference: GA
Altitude.MSL.Single Value: 5000

Environment
Flight Conditions: Mixed

Aircraft / 1
Controlling Facilities.ARTCC: ZTL.ARTCC
Controlling Facilities.Tower: ATL.Tower
Operator.Common Carrier: Air Carrier
Make Model: ATR 72
Mission: Passenger
Flight Phase.Climbout: Intermediate Altitude

Aircraft / 2
Controlling Facilities.Tower: ATL.Tower
Operator.Common Carrier: Air Carrier
Make Model: DC-9 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Ground: Takeoff Roll

Component / 1
Aircraft Component: Hydraulic Main System
Aircraft Reference: X

Person / 1
Function.Flight Crew: First Officer
Experience.Flight Time.Total: 650
Experience.Flight Time.Last 90 Days: 150
Experience.Flight Time.Type: 300
ASRS Report: 520900

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Radar

Person / 5
Function.Controller: Local

Events
Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Inflight Encounter: Wake Turbulence
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Flight Crew: Declared Emergency
Resolutory Action.Flight Crew: Landed In Emergency Condition
Resolutory Action.Controller: Provided Flight Assist
Consequence.Other : Maintenance Action

**Supplementary**

Problem Areas : Aircraft

**Narrative :**
CLBING OUT AND ENRTE TO ATL LOST HYD FLAPS, BRAKES, NOSEWHEEL STEERING AND GEAR EXTENSION WAS LOST DUE TO THE HYD FAILURE. RAN CHKLIST, NOTIFIED COMPANY AND ATC. CONTINUED TO ATL, DECLARED EMER AND WAS GIVEN RWY 26L BUT WE REQUESTED RWY 27R AND GOT IT. MADE NO FLAP LNDG. TWR LET A DC9 TAKE OFF JUST PRIOR TO OUR LNDG, WE FLEW THROUGH HIS WAKE ON SHORT FINAL, WAS PROBABLY NOT THE BEST THING FOR OUR SIT. UPON TOUCHDOWN WE LOST BRAKES AND STEERING. CAPT GOT PLANE CLR OF RWY 27R AND WE WERE TOWED INTO THE GATE SAFELY. OTHER THAN SHORT FINAL PROB WITH WAKE TURB FROM DC9 NO OTHER PROBS NOTED. EVERYTHING WAS HANDLED WELL BY COMPANY, ATC, AND CREW.

**Synopsis :**
ATR72 FLC DECLARED AN EMER AFTER THEIR HYD SYS FAILED, RESULTING IN THE LOSS OF FLAPS, BRAKES, NOSEWHEEL STEERING AND NORMAL GEAR EXTENSION.
ACN: 521581

Time
Date: 200108
Day: Tue
Local Time Of Day: 1201 To 1800

Place
Locale Reference: Airport: IAH.Airport
State Reference: TX
Altitude.MSL.Bound Lower: 2000
Altitude.MSL.Bound Upper: 2200

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities: Tower: IAH.Tower
Operator: Common Carrier: Air Carrier
Make Model: Brasilia EMB-120 All Series
Mission: Passenger
Flight Phase: Descent: Approach
Route In Use: Approach: Visual

Aircraft / 2
Controlling Facilities: Tower: IAH.Tower
Operator: Common Carrier: Air Carrier
Make Model: A319
Mission: Passenger
Navigation In Use: Other: FMS or FMC
Flight Phase: Descent: Approach

Person / 1
Function: Oversight: PIC
Function: Flight Crew: Captain
Experience: Flight Time: Total: 2950
Experience: Flight Time: Last 90 Days: 180
Experience: Flight Time: Type: 1700
ASRS Report: 521581

Person / 2
Function: Flight Crew: First Officer

Person / 3
Function: Oversight: PIC
Function: Flight Crew: Captain

Person / 4
Function: Controller: Approach

Events
Anomaly: Altitude Deviation: Excursion From Assigned Altitude
Anomaly: Inflight Encounter: Wake Turbulence
Independent Detector: Other: Flight Crew A: 1
Independent Detector: Other: Flight Crew B: 2
Resolutory Action: Flight Crew: Returned To Intended or Assigned Course
Resolutory Action: Flight Crew: Took Precautionary Avoidance Action

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
ACFT WAS CLRED FOR VISUAL APCH BEHIND A319 WHICH WE HAD IN SIGHT. APCH CTL TOLD US TO CROSS THE MARKER BEACON AT OR BELOW 2000 FT. WE INITIATED DSCNT FROM 3000 FT TO COMPLY WITH THE RESTR AND BEGAN TO SLOW TO FOLLOW THE A319. JUST PRIOR TO XING THE OM OUR ACFT ENCOUNTERED MILD WAKE TURB FROM THE PRECEDING A319. THE FO PITCHED UP TO ESCAPE THE WAKE AND WE CROSSED THE MARKER BTWN 2100 FT AND 2200 FT. WE RETURNED TO 2000 FT AS QUICKLY AS POSSIBLE AND NO TFC CONFLICTS OCCURRED. WE LANDED WITHOUT INCIDENT, AND NO PROBS WERE RPTED TO US BY TWR. CAUSES OF THIS INCIDENT WERE OUR WILLINGNESS TO ACCEPT A VISUAL CLRNC BEHIND AN ACFT THAT WAS HIGHER THEN OUR APCH. ADDITIONALLY, WE WERE TOLD TO KEEP OUR SPD UP ON THE APCH PATH. THIS INSTRUCTION PLACED PRESSURE ON US TO FOLLOW THE PRECEDING ACFT MORE CLOSELY THAN WE WOULD HAVE PREFERRED.

Synopsis:
EMB120 FO CLBED IN RESPONSE TO WAKE TURB FROM AN A319 DURING FINAL APCH NEAR THE OM CAUSED BY APCH CTLR INSTRUCTIONS TO INCREASE SPD TO FOLLOW THE A319 AND FLYING INTO THE WAKE FROM A LOWER ALT.
ACN: 521595

Time
Date: 200108
Day: Wed
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: SJC.Airport
State Reference: CA
Altitude.MSL.Bound Lower: 1500
Altitude.MSL.Bound Upper: 2000

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.Tower: SJC.Tower
Make Model: Robinson R44
Mission: Pleasure
Flight Phase.Cruise: Level

Aircraft / 2
Controlling Facilities.Tower: SJC.Tower
Make Model: Commercial Fixed Wing
Flight Phase.Climbout: Initial

Person / 1
Function.Flight Crew: Single Pilot
Experience.Flight Time.Total: 780
Experience.Flight Time.Last 90 Days: 40
Experience.Flight Time.Type: 120
ASRS Report: 521595

Person / 3
Function.Controller: Local

Events
Anomaly.Altitude Deviation: Excursion From Assigned Altitude
Anomaly.Conflict: Airborne Less Severe
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Clearance
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Flight Crew: Took Precautionary Avoidance Action
Consequence.FAA: Reviewed Incident With Flight Crew

Supplementary
Problem Areas: Airspace Structure
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
I WAS ON A VFR FLT FROM GNOSS (DVO) TO SALINAS (SNS) VIA OAKLAND AND SAN JOSE, USING FLT FOLLOWING. AT THE TIME OF THE INCIDENT, I HAD BEEN SWITCHED TO SAN JOSE TWR FOR THE TRANSITION OF THEIR AIRSPACE, AND GIVEN A CLRNC 'TO CROSS MIDFIELD AT OR ABOVE 2000 FT.' I CONTINUED ON THE SAME HDG TOWARDS THE FIELD. HOWEVER, A JET ACFT TAKING OFF TURNED DIRECTLY TOWARDS ME AND WOULD PASS CLOSE ENOUGH OVERHEAD TO MAKE ME VERY CONCERENED ABOUT WAKE TURB. SO I TOOK EVASIVE ACTION BY USING AFT CYCLIC AND LOWERED THE COLLECTIVE TO REDUCE THE HELI TO MANEUVERING SPD. I LOST ABOUT 500 FT IN ALT. THERE WAS NO TIME TO GET PERMISSION TO TAKE ACTION WITH THE BUSY RADIO TFC. SHORTLY AFTERWARDS, A DIFFERENT CTLR SAID THAT 'I HAD BEEN GIVEN A CLRNC TO MAINTAIN VFR AND CROSS MIDFIELD AT OR ABOVE 2000 FT.' AND I 'HAD DSNDED INTO THE APCH PATH.' I REPLIED THAT 'I NEEDED TO TAKE EVASIVE ACTION TO AVOID THE WAKE TURB.' (NEVERTHELESS, I STILL RECEIVED A STRONG JOLT OF TURB.) ALSO IT WAS MY UNDERSTANDING THAT I WAS CLRED TO 'CROSS MIDFIELD AT OR ABOVE 2000 FT,' NOT 'TO MAINTAIN 2000 FT OR ABOVE AND CROSS MIDFIELD.' THE WORDING OF THE CLRNC IS CONFUSING AS TO THE ALT REQUIREMENT IMMEDIATELY PRIOR TO REACHING MIDFIELD. MORE WORRYING, IS THAT CTLRS GIVE THE USUAL WARNING ABOUT WAKE TURB TO DEPARTING ACFT BUT DO NOT SEEM TO BE CONCERNED ABOUT TURB FROM OVERFLYING JETS DURING OP TO AND FROM LARGE ARPTS. I EXPERIENCED EXTREME TURB AT SFO WHEN A HVY SLOW JET WAS ALLOWED TO TAKE OFF RIGHT OVER ME WHILE TRANSITIONING THEIR AIRSPACE ON A PREVIOUS OCCASION. (BANGED MY HEAD ON THE CEILING!)

Synopsis:
ROBINSON R44 HELI PLT DSNDS TO AVOID THE WAKE TURB OF A JET DEPARTING FROM THE SJC ARPT OVER WHICH HE WAS ABOUT TO TRANSITION AT 2000 FT MSL. HE EXPERIENCED SOME TURB EVEN THOUGH HE DSNDED 500 FT AND COMPLAINS THAT ATC DOES NOT TAKE INTO CONSIDERATION THE WAKE OF OVERFLYING JETS DURING OP TO AND FROM LARGE ARPTS.
ACN: 522318

Time
Date: 200108
Day: Fri
Local Time Of Day: 1801 To 2400

Place
Locale Reference, Airport: SFO.Airport
State Reference: CA
Altitude.AGL.Bound Lower: 500
Altitude.AGL.Bound Upper: 1000

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.TRACON: O90.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B737-300
Mission: Passenger
Flight Phase.Descent: Approach
Flight Phase.Landing: Go Around
Route In Use.Approach: Visual

Aircraft / 2
Controlling Facilities.TRACON: O90.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Descent: Approach

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 9800
Experience.Flight Time.Last 90 Days: 200
ASRS Report: 522318

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Approach

Person / 5
Function.Controller: Local

Events
Anomaly.Conflict: Airborne Critical
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Published Procedure
Anomaly.Non Adherence: Required Legal Separation
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Flight Crew: Executed Go Around
Resolutory Action.Flight Crew: Took Evasive Action
Resolutory Action.Flight Crew: Took Precautionary Avoidance Action
Resolutory Action.Controller: Issued Advisory
Supplementary

Problem Areas: Airport
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
WE WERE CLRED FOR A VISUAL APCH TO RWY 28L AT SFO. BAY TRACON POINTED OUT A B757 WHICH WAS APCHING RWY 28R. WE WERE PAIRED UP WITH THE B757 AND WERE TOLD THAT HE WAS MAINTAINING VISUAL SEPARATION WITH US. WE WERE WELL AHEAD OF THE B757 AND ACCORDING TO BAY TRACON, OUR SPDS WERE MATCHED. BAY APCH HAD ASSIGNED US 180 KIAS TO THE SAN MATEO BRIDGE, WHICH WE MAINTAINED. AFTER PASSING THE BRIDGE WE STARTED SLOWING TO OUR FINAL APCH SPD. WE NOTICED THE B757 GAINING ON US, STILL CONFIGURED GEAR UP. THE B757 DID NOT LOWER HIS LNDG GEAR UNTIL BELOW 900 FT AGL AND WAS STILL GAINING ON US. OUR FINAL APCH SPD WAS 140 KIAS AND THE FO (PF) WAS CONFIGURED AND STABILIZED BY 1000 FT AGL. AT APPROX 500 FT AGL, THE B757 STARTED TO OVERTAKE US AT A RAPID RATE AND WE HAD NO CHOICE BUT TO GO AROUND FOR WAKE TURB AVOIDANCE. THIS WAS OUR SECOND GAR FOR THIS FLT. THE FIRST ONE WAS CAUSED BY INSUFFICIENT SEPARATION WITH A RWY 1R DEP AND WAS INITIATED BY SFO TWR. THE EXTRA FUEL ON THIS SEGMENT SIGNIFICANTLY REDUCED THE STRESS LEVEL IN THE FLT DECK. THIS IS THE SECOND TIME IN ABOUT 4 YRS THAT I'VE PERFORMED BACK-TO-BACK GAR'S AT SFO DUE TO LACK OF SEPARATION WITH HVY ACFT WHILE MAINTAINING ATC ASSIGNED SPDS.

Synopsis:
B737 ON APCH TO SFO RWY 28L EXECUTES GAR WHEN OVERTAKEN BY B757 ON APCH TO RWY 28R.
Time
Date: 200109
Day: Mon
Local Time Of Day: 0601 To 1200

Place
Locale Reference Airport: DFW Airport
State Reference: TX
Altitude AGL: Single Value: 400

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities Tower: DFW Tower
Operator Common Carrier: Air Carrier
Make Model: EMB ERA 145 ER&LR
Mission: Passenger
Flight Phase Landing: Roll

Aircraft / 2
Controlling Facilities Tower: DFW Tower
Operator Common Carrier: Air Carrier
Mission: Passenger
Flight Phase Climbout: Initial

Person / 1
Function Oversight: PIC
Function Flight Crew: Captain
Experience Flight Time Total: 17000
Experience Flight Time Last 90 Days: 200
Experience Flight Time Type: 1450
ASRS Report: 523575

Person / 2
Function Flight Crew: First Officer

Person / 3
Function Oversight: PIC
Function Flight Crew: Captain

Person / 4
Function Controller: Local

Person / 5
Function Oversight: Supervisor

Events
Anomaly Conflict: NMAC
Anomaly Inflight Encounter: Wake Turbulence
Independent Detector Other Flight Crew A: 1
Independent Detector Other Flight Crew B: 2
Consequence FAA: Reviewed Incident With Flight Crew

Supplementary
Problem Areas: ATC Human Performance
Narrative:
FO WAS FLYING. WE WERE CLRED FOR VISUAL APCH 17L. APCH TO 17L CROSSES RWY 13L. ATR-72 WAS CLRED FOR TKOF ON 13L WITH US ON SHORT FINAL 17L. TWR DID POINT OUT MUTUAL TFC. ATR TOOK LONGER THAN EXPECTED TO START TO ROLL AND ACCELERATED SLOWLY. FO ELECTED NOT TO GO AROUND AND I DID NOT EITHER. (WISH NOW I HAD!) WE GOT TOO CLOSE TO ATR FOR COMFORT, AND PASSED THROUGH ITS WAKE TURBULENCE. AFTER LNDG, I TOLD ATC THAT SPACING WAS TOO CLOSE AND WE ENCOUNTERED WAKE TURBULENCE. TWR SAID: ’...FROM AN ATR!!’ I DID NOT APPRECIATE THAT REMARK AND CALLED TWR ON PHONE. THE SUPVR KNEW ALL ABOUT THIS INCIDENT. BASICALLY ALL THIS WAS MY FAULT, CAUSE WE WERE ON VISUAL APCH AND TO MAINTAIN OUR OWN SEPARATION. (LOOKS GOOD ON PAPER....BUT IN THE AIR IT IS A LITTLE DIFFERENT!) SUPVR WAS DEFENSIVE, I GOT DEFENSIVE TOO. SUPVR TOLD ME THAT TWR CTLR WAS SURPRISED TO HEAR AN ATR HAS WAKE TURBULENCE (???) AND WAS NOT TRYING TO BE A SMART ALECK. (I AM NOT BUYING IT...) I SHOULD HAVE ORDERED A ‘GAR’ FOR SAFETY. I LET MYSELF GET ’BOXED’ IN.

Synopsis:
ATCT LCL CTLR AT DFW QUESTIONS PLT’S COMPLAINT ON WAKE TURBULENCE BTWN AN ATR-72 DEPARTING RWY 13L AND AN E-145 LNDG ON RWY 17L.
ACN: 523988

Time
Date: 200108
Day: Thu
Local Time Of Day: 0601 To 1200

Place
State Reference: OH
Altitude.MSL.Single Value: 38500

Aircraft / 1
Controlling Facilities.ARTCC: ZOB.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: A320
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Cruise: Enroute Altitude Change

Aircraft / 2
Controlling Facilities.ARTCC: ZOB.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: B767 Undifferentiated or Other Model
Flight Phase.Cruise: Level

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 15000
Experience.Flight Time.Last 90 Days: 130
Experience.Flight Time.Type: 3500
ASRS Report: 523988

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Radar

Events
Anomaly.Inflight Encounter: Wake Turbulence
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Flight Crew: Exited Adverse Environment

Supplementary
Problem Areas: Airspace Structure
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Weather
Narrative:
WE WERE IN A SLOW CLB TO FL390 AT ABOUT FL385 TO FL388, WE ENCOUNTERED MODERATE TURB WITH SOME WING ROCKING, AS CAN OCCUR IN WAKE TURB. THE WINDS AT ALT WERE ONLY 270/12. WE ASKED IF THERE WAS ANYONE AHEAD OF US ON J6. ATC SAID A B767 AT 12 MI AHEAD. WE ASKED TO OFFSET A MI OR 2 AND WE WERE BACK IN SMOOTH AIR. AT FL390 WE WERE GIVEN ON COURSE. I HAVE HAD NUMEROUS WAKE TURB ENCOUNTERS THIS SUMMER. ALMOST ALWAYS I WAS ON A JET AIRWAY WITH VERY LITTLE WIND AT ALT.

Synopsis:
AN A320 FLT RUNS INTO UNEXPECTED WAKE TURB WHILE CLBING TO FL390 12 MI BEHIND A B767 IN CRUISE AT THE SAME ALT ON FREQ WITH ZOB, OH.
Time
Date: 200108
Day: Fri
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: SFO.Airport
State Reference: CA
Altitude.AGL.Single Value: 35

Aircraft / 1
Controlling Facilities.TRACON: O90.TRACON
Controlling Facilities.Tower: SFO.Tower
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Landing: Go Around
Route In Use.Approach: Visual

Aircraft / 2
Controlling Facilities.TRACON: O90.TRACON
Controlling Facilities.Tower: SFO.Tower
Operator.Common Carrier: Air Carrier
Make Model: B767 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Approach: Visual

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 13000
Experience.Flight Time.Last 90 Days: 50
ASRS Report: 524002

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Local

Person / 5
Function.Controller: Approach

Events
Anomaly.Conflict: Airborne Less Severe
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Other Anomaly: Loss Of Aircraft Control
Independent Detector.Other.Flight Crew:A: 1
Resolutory Action.Flight Crew: Executed Go Around
Resolutory Action.Flight Crew: Exited Adverse Environment
Resolutory Action.Flight Crew: Took Precautionary Avoidance Action
**Supplementary**

Problem Areas: Airport  
Problem Areas: Environmental Factor  
Problem Areas: Flight Crew Human Performance  

**Narrative:**  
ACFT TYPE IS B757. WE WERE CLEARED FOR THE TIP TOE VISUAL APCH TO RWY 28L AND ADVISED OF TFC FLYING THE CHARTED VISUAL TO RWY 28R, AN ACR Y B767. THE B767 WAS INITIALLY VERY SLIGHTLY BEHIND US, BUT BECAUSE OF A FASTER APCH SPD, PASSED US AT APPROX 1200 FT AGL. WE LANDED SLIGHTLY BEHIND HIM. AT APPROX 30 FT AGL, OUR L WING DROPPED ABOUT 15-20 DEGS WITH ALMOST FULL LAILERON TO COMPENSATE. A GAR WAS INITIATED. TOUCHDOWN OCCURRED BEFORE GAR THRUST AND INCREASED PITCH ATTITUDE TOOK EFFECT. WE APPARENTLY ENCOUNTERED WAKE TURB FROM THE HEAVY ACFT ON THE PARALLEL RWY. I DON'T BELIEVE ANYONE INVOLVED DID ANYTHING WRONG, WHICH HIGHLIGHTS THE QUESTION OF THE SAFETY OF SFO CHARTED VISUAL APCHS WHEN WAKE TURB IS CONSIDERED.

**Synopsis:**  
B757, ALMOST IN LNDG FLAIR, EXECUTES GAR DUE TO WAKE TURB CAUSED FROM LNDG B767 LNDG ON PARALLEL RWY AT SFO.
ACN: 524020

Time
Date: 200109
Day: Sun
Local Time Of Day: 1801 To 2400

Place
Locale Reference: Airport: ORD.Airport
State Reference: IL
Altitude: MSL: Single Value: 3000

Aircraft / 1
Controlling Facilities: TRACON: C90.TRACON
Controlling Facilities: Tower: ORD.Tower
Operator: Common Carrier: Air Carrier
Make Model: A320
Mission: Passenger
Navigation In Use: Other: FMS or FMC
Flight Phase: Descent: Approach

Aircraft / 2
Controlling Facilities: TRACON: C90.TRACON
Controlling Facilities: Tower: ORD.Tower
Operator: Common Carrier: Air Carrier
Make Model: Stratoliner 720
Mission: Passenger
Flight Phase: Descent: Approach

Person / 1
Function: Oversight: PIC
Function: Flight Crew: First Officer
Experience: Flight Time: Total: 11000
Experience: Flight Time: Last 90 Days: 200
Experience: Flight Time: Type: 2055
ASRS Report: 524020

Person / 2
Function: Flight Crew: Captain
Experience: Flight Time: Total: 20000
Experience: Flight Time: Last 90 Days: 100
Experience: Flight Time: Type: 24
ASRS Report: 523793

Person / 3
Function: Observation: Observer

Person / 6
Function: Maintenance: Technician

Events
Anomaly: Inflight Encounter: Wake Turbulence
Anomaly: Other Anomaly: Loss Of Aircraft Control
Independent Detector: Other: Flight Crew: A: 1
Independent Detector: Other: Flight Crew: B: 2
Resolutory Action: Flight Crew: Declared Emergency
Resolutory Action: Flight Crew: Landed In Emergency Condition
Resolutory Action: Controller: Issued New Clearance
Consequence: Other: Company Review
Consequence: Other: Maintenance Action
Supplementary

Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance

Narrative:
ORD APCH CLRED US FOR THE APCH TO RWY 9R, MAINTAIN 190 KTS TO DEANA, FOLLOWING A HVY B767. OVER 1 MI OUTSIDE DEANA, WE SELECTED MANAGE SPD AND SLOWED TO APCH SPD. CAPT DISCONNECTED THE AUTOPLT AT ABOUT 800 FT TO STAY SLIGHTLY ABOVE THE GS. OUR APCH WAS NORMAL THROUGH 50 FT AGL WHEN CAPT RETARDED THE THROTTLES TO IDLE THRUST. AT ABOUT 30 FT, THE ACFT STARTED TO SINK RAPIDLY. WE GOT A GPWS SINK RATE WARNING. CAPT ADDED PWR AND WENT AROUND. THE MAIN WHEELS FIRMLY CONTACTED THE RWY DURING THE GAR. AFTER THE MISSED APCH, WE LEVELED AT 4000 FT, CALLED THE CHIEF PURSER TO MAKE SURE EVERYONE WAS ALRIGHT. SHE HAD CHKED WITH THE FLT ATTENDANTS IN THE BACK AND EVERYONE WAS OK. WE RETURNED FOR AN UNEVENTFUL LNDG ON RWY 4R. WE DID CALL FOR THE EQUIP JUST IN CASE THERE WAS ANY GEAR OR TIRE DAMAGE FROM OUR PREVIOUS GAR. WE PULLED INTO THE RWY 27R PAD AND THE EMER CREWS CHKED OUR GEAR AND TIRES. EVERYTHING WAS OK. WE TAXIED TO THE GATE AND SPOKE TO MAINT ABOUT THE HARD LNDG. SUPPLEMENTAL INFO FROM ACN 523793: ABOUT 800 FT, I DISCONNECTED THE AUTOPLT TO STAY SLIGHTLY ABOVE THE GS. AT 50 FT ‘HAT’ STARTED RETARDING THROTTLES AND ABOUT 30 FT, ‘HAT’ NOTICED A SUDDEN CHANGE IN SINK RATE. NOTICING THAT WE WERE CAUGHT IN WAKE VORTICES, INITIATED A GAR. THE ACFT TOUCHED DOWN AT A HIGH SINK RATE AS WE ACCELERATED FOR THE GA. I FEEL THAT CLOSELY FOLLOWING TFC PATTERNS AT ORD ARE STARTING TO BECOME TIGHTER AND MORE DANGEROUS. CLOSELY FOLLOWING HVY JETS SHOULD BE AVOIDED.

Synopsis:
A320 CAPT HAD A HARD LNDG AT ORD WHILE GETTING IOE TRAINING.
ACN: 524113

Time
Date: 200109
Day: Sat
Local Time Of Day: 0601 To 1200

Place
Locale Reference.Airport: LAX.Airport
State Reference: CA
Altitude.MSL.Single Value: 3000

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities.TRACON: SCT.TRACON
Operator.Common Carrier: Air Carrier
Make Model: SF 340b
Mission: Passenger
Flight Phase.Descent: Approach
Route In Use.Approach: Instrument Precision

Aircraft / 2
Controlling Facilities.TRACON: SCT.TRACON
Operator.Common Carrier: Air Carrier
Make Model: MD-80 Series (DC-9-80) Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Descent: Approach
Route In Use.Approach: Visual

Aircraft / 3
Controlling Facilities.TRACON: SCT.TRACON
Make Model: B767 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Descent: Approach

Component / 1
Aircraft Component: Autopilot
Aircraft Reference: X

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 11500
Experience.Flight Time.Last 90 Days: 170
Experience.Flight Time.Type: 3200
ASRS Report: 524113

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 5
Function.Controller: Approach
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Other Spatial Deviation : Track Or Heading Deviation
Anomaly.Altitude Deviation : Undershoot
Anomaly.Conflict : Airborne Less Severe
Anomaly.Inflight Encounter : Wake Turbulence
Anomaly.Inflight Encounter : Weather
Anomaly.Non Adherence : Clearance
Anomaly.Non Adherence : Published Procedure
Independent Detector.Other.Flight CrewA : 1

Supplementary
Problem Areas : Airport
Problem Areas : Airspace Structure
Problem Areas : Environmental Factor
Problem Areas : Flight Crew Human Performance
Narrative:
ACFT (SF340B) WAS IN THE BASE TURN DURING TRANSITION FROM VECTORS TO A VISUAL APCH, FOLLOWING ANOTHER ACFT (MD80) FOR A VISUAL APCH TO RWY 24R AT LAX. PF WAS FO ON R SIDE OF ACFT MAKING R TURNS TO BASE AND TO FINAL. DURING BASE TO FINAL, I LOWERED THE GEAR AND COMPLETED THE ASSOCIATED FLOW ITEMS. I WAS ABOUT TO SUGGEST TO THE FO TO TURN INSIDE THE LOC FINAL APCH COURSE (N OF COURSE) TO AVOID WAKE TURB WHEN WE NOTED THAT WE WERE A DOT HIGH ON THE GS AND WE WOULD BE ABOVE THE WAKE TURB. I FELT THAT THIS WOULD SAFELY AVOID THE TURB AND DIDN'T FEEL A NEED TO COMMENT ON MY IDEA. AS WE STARTED OUR TURN TO FINAL, I SAW AN ACFT XING THE HARBOR FREEWAY, THAT I THOUGHT WAS THE TFC WE WERE TO FOLLOW (BUT TURNED OUT TO BE A DC9 INBOUND FOR RWY 25) AND ESTIMATED THAT WE WERE ABOUT 3 MI IN TRAIL AND ABOVE THE GS. THE ARPT WAS ABOUT 13 MI FROM OUR POS. AS WE STARTED OUR R TURN TO FINAL, I CHKED TO MY L AND SAW A B767 ABOUT 2 MI AWAY AND ON WHAT SEEMED TO BE A CONVERGING COURSE AND AT THE SAME ALT. I ADVISED THE FO TO TIGHTEN UP THE R TURN, CONTINUING NORTHWESTWARD AND TO CLB TO AVOID THE TFC. AS I WAS SAYING THIS, WE BOTH REALIZED THAT WE WERE S OF THE RWY 24R LOC. AS WE CORRECTED N, I ADVISED APCH THAT WE WERE CORRECTING N. THE FO NOTED THAT THE AUTOPLT HAD NOT CAPTURED THE FINAL APCH AS IT WAS SET UP TO DO. WE CORRECTED TO THE RWY 24R LOC AND LANDED AT LAX. A MAJOR CONTRIBUTING FACTOR THAT WOULD HAVE PREVENTED THIS EVENT WAS THAT WE DID NOT HAVE A WORKING TCASII SYS. IT HAD BEEN PREVIOUSLY DEFERRED. HAD THIS SYS BEEN WORKING, IT WOULD HAVE ALLOWED ME TO REALIZE THAT THERE WERE 2 ACFT ON FINALS AHEAD OF US (ONE FOR THE S COMPLEX AND ONE FOR THE N COMPLEX). IT WOULD HAVE REDUCED MY CONCERNS OF WAKE TURB. PLUS I WOULD HAVE 'SEEN' THE B767 EARLIER IN THE APCH ON THE TCASII. ANOTHER FACTOR WAS THAT THE VISIBILITY WAS ABOUT 5 MI IN HAZE AT THE TIME. THIS ALLOWED ME TO THINK I SAW OUR TFC-TO-FOLLOW WHEN IN FACT, IT WAS TFC FOR ANOTHER RWY.

Synopsis:
SF34 FLC OVERSHOOTS FINAL WHILE DISTRACTED BY OTHER ACFT ON PARALLEL APCHS TO LAX.
Time
Date : 200109
Day : Tue
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : ORD.Airport
State Reference : IL
Altitude.MSL.Single Value : 3000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.Tower : ORD.Tower
Operator.Common Carrier : Air Carrier
Make Model : B737-300
Mission : Passenger
Navigation In Use.Other : FMS or FMC
Flight Phase.Descent : Approach

Aircraft / 2
Controlling Facilities.Tower : ORD.Tower
Operator.Common Carrier : Air Carrier
Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model
Mission : Passenger
Navigation In Use.Other : FMS or FMC
Flight Phase.Descent : Approach

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Last 90 Days : 998
ASRS Report : 524634

Person / 2
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 4600
Experience.Flight Time.Last 90 Days : 170
Experience.Flight Time.Type : 1196
ASRS Report : 524635

Person / 3
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 4
Function.Controller : Local

Events
Anomaly.Inflight Encounter : Wake Turbulence
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.None Taken : Detected After The Fact
Consequence.Other : Company Review

Supplementary
Problem Areas : Weather
Narrative:
FINAL APCH TO 4R AT CHICAGO ENCOUNTERED WAKE TURB AT 3000 FT MSL. FOLLOWING A MD80. RECOVERED AND LANDED WITHOUT INCIDENT.

Synopsis:
B737-300 CREW ENCOUNTERED WAKE TURB FROM PRECEDING MD-80 ACFT AT ORD.
Time
Date: 200109
Day: Mon
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: JFK.Airport
State Reference: NY
Altitude.MSL.Single Value: 1500

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities.TRACON: N90.TRACON
Controlling Facilities.Tower: JFK.Tower
Operator.Common Carrier: Air Carrier
Make Model: B767-300
Mission: Passenger
Flight Phase: Descent: Approach
Route In Use.Approach: Instrument Non Precision

Aircraft / 2
Controlling Facilities.TRACON: N90.TRACON
Controlling Facilities.Tower: JFK.Tower
Operator.Common Carrier: Air Carrier
Make Model: B747 Undifferentiated or Other Model
Mission: Passenger
Flight Phase: Descent: Approach

Aircraft / 3
Controlling Facilities.TRACON: N90.TRACON
Controlling Facilities.Tower: JFK.Tower
Operator.Common Carrier: Air Carrier
Make Model: DC-10 Undifferentiated or Other Model
Mission: Passenger
Flight Phase: Descent: Approach

Person / 1
Function.Flight Crew: First Officer
Experience.Flight Time.Last 90 Days: 200
ASRS Report: 524783

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 11300
Experience.Flight Time.Last 90 Days: 242
Experience.Flight Time.Type: 2120
ASRS Report: 523855

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Oversight: PIC
Function.Flight Crew: Captain
**Person / 6**  
Function.Controller : Local

**Person / 5**  
Function.Controller : Approach

**Events**  
Anomaly.Other Spatial Deviation : Altitude Heading Rule Deviation  
Anomaly.Conflict : Airborne Critical  
Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Non Adherence : Clearance  
Anomaly.Non Adherence : Published Procedure  
Anomaly.Non Adherence : Required Legal Separation  
Anomaly.Other Anomaly : Speed Deviation  
Anomaly.Other Anomaly : Unstabilized Approach  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolutory Action.Flight Crew : Exited Adverse Environment  
Resolutory Action.Flight Crew : Took Precautionary Avoidance Action  
Resolutory Action.Controller : Issued New Clearance

**Supplementary**  
Problem Areas : Airport  
Problem Areas : ATC Human Performance  
Problem Areas : Environmental Factor  
Problem Areas : Flight Crew Human Performance
Narrative:
WE WERE ON VECTORS FOR THE VOR RWY 13L APCH AT JFK, FOLLOWING A DC10. NY APCH SQUEEZED A B747 BTWN OUR ACFT AND THE DC10. AT THE TIME WE WERE APPROX 8 MI IN TRIAL OF THE DC10. WE WERE TOLD BY ATC TO MAINTAIN 180 KIAS UNTIL CRI VOR. THE B747 WAS ALSO TOLD TO MAINTAIN 180 KIAS TO THE VOR. AT THE TIME THE SPD CLRNC WAS ISSUED WE WERE APPROX 3 1/2 MI IN TRAIL OF THE B747. WE REQUESTED THE PARALLEL RWY (13R) AS SOON AS WE REALIZED THE SPACING WAS GOING TO BE INADEQUATE, AND WE ADVISED ATC THAT THE REASON WAS FOR WAKE TURB AVOIDANCE. WHILE HOLDING 180 KTS AND WAITING FOR CLRNC TO RWY 13R WE NOTICED THAT THE SPACING WITH THE B747 WAS DETERIORATING. ATC CAME BACK WITH A CLRNC TO CONTACT TWR WITH OUR REQUEST. AS JFK APPROVED OUR REQUEST FOR RWY 13R WE ENCOUNTERED THE B747'S WAKE. OUR ACFT BANKED STEEPLY TO THE R AND BEGAN TO DSND. THE CAPT APPLIED A LARGE AMOUNT OF L AILERON, BUT THE ACFT DIDN'T RESPOND UNTIL HE APPLIED L RUDDER. THE ACFT RECOVERED AFTER APPROX LOSING 200 FT AND 10 TO 15 KIAS. WE LANDED WITHOUT FURTHER INCIDENT. SUPPLEMENTAL INFO FROM ACN 523855: BOTH THE FO AND I THEN NOTICED THE B747 HAD EXTENDED HIS GEAR AND LNDG FLAPS. WE STARTED TO SLOW, WITH A DRIFT OUT TO HIS RIGHT SIDE. OUR ACFT ROLLED 45 DEGS TO 60 DEGS R WING DOWN AND APPROX 15 DEGS NOSE LOW. AILERONS HAD NO EFFECT TO STABILIZE ACFT, BUT STEADY L RUDDER BROUGHT THE WINGS TO LEVEL. AIRSPEED WAS ABOUT 150 KIAS AT THE CONCLUSION OF EVENT.

Synopsis:
B767 FLC INITIATE EVASIVE MANEUVER FOLLOWING A B747 TIGHTLY SEQUENCED IN FRONT ON APCH THE JFK. N90 PASSES THE PROB ON TO JFK TWR.
Time
Date: 200109
Day: Tue
Local Time Of Day: 1801 To 2400

Place
State Reference: HI
Altitude.MSL.Single Value: 36600

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.ARTCC: ZZZ.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: B777 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Intermediate Altitude

Aircraft / 2
Controlling Facilities.ARTCC: ZZZ.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: DC-10 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Cruise: Level

Person / 1
Function.Flight Crew: First Officer
Experience.Flight Time.Type: 1260
ASRS Report: 525868

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 10000
Experience.Flight Time.Type: 451
ASRS Report: 525933

Person / 4
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 5
Function.Controller: Radar

Events
Anomaly.Inflight Encounter: Wake Turbulence
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Controller: Issued New Clearance
Consequence.FAA: Reviewed Incident With Flight Crew
Consequence.Other: Physical Injury

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
WE WERE DSNING FROM FL390 THROUGH FL366 WHEN WE HIT WAKE TURB FROM ACR X WHICH WAS 11 MI AHEAD OF US. I LEVELED OFF AND ADDED PWR TO GET ABOVE THEIR DSCNT PROFILE. THE WAKE TURB WAS OVER IN A FEW SECONDS. ATC COULD NOT BELIEVE THAT WE HAD HIT ACR X WAKE TURB, BUT WE DID. FINALLY ATC GAVE ME THE REQUESTED L OR R TURN. THE REST OF THE FLT WAS UNEVENTFUL. AT THE GATE, I ASKED IF ANYONE WAS HURT AND THEN FOUND OUT 1 FLT ATTENDANT HURT HER ANKLE AND CUT A FINGER. NO PAX WERE INJURED. I AM NOT SURE HOW I WILL PREVENT THIS IN THE FUTURE. 11 MI SHOULD BE ENOUGH, BUT IT WASN'T. SUPPLEMENTAL INFO FROM ACN 525933: WE WERE GIVEN A DSCNT CLRNC TO 10000 FT. JUST AFTER WE BEGAN OUR DSCNT, WE ENCOUNTERED WAKE TURB FROM A PRECEDING DC10. MY COPLT WAS FLYING AND TALKING TO ATC WHILE I WAS LISTENING TO ATIS. HE IMMEDIATELY ASKED FOR CLRNC N OR S OF COURSE AND THEN LEVELLED OFF. THE ENCOUNTER WAS OVER IN JUST A FEW SECONDS. WE FLEW N OF OUR COURSE ABOUT 2 MI THEN WENT DIRECT TO BAMBO. NO OTHER TURB OCCURRED. AFTER LNDG, WE LEARNED THAT 1 FLT ATTENDANT CUT HER THUMB AND SLIGHTLY TWISTED HER ANKLE DURING THE ENCOUNTER. I DON'T KNOW HER NAME.

Synopsis:
A B777 CREW, FOLLOWING A DC10 ON DSCNT, ENCOUNTERED WAKE TURB AT FL366.
Time
Date: 200111
Day: Mon
Local Time Of Day: 1801 To 2400

Place
Locale Reference: Airport: FAT.Airport
State Reference: CA
Altitude: AGL: Single Value: 0

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities: Tower: FAT.Tower
Operator: Common Carrier: Air Taxi
Make Model: PA-31 Navajo Chieftan/Majave/Navajo
Mission: Freight
Flight Phase: Ground: Taxi

Person / 1
Function: Flight Crew: Single Pilot
Experience: Flight Time: Total: 2800
Experience: Flight Time: Last 90 Days: 120
Experience: Flight Time: Type: 250
ASRS Report: 529267

Person / 2
Function: Controller: Ground

Events
Anomaly: Incursion: Runway
Anomaly: Inflight Encounter: Wake Turbulence
Anomaly: Non-Adherence: Clearance
Independent Detector: Other: Controller A: 2
Resolutory Action: None Taken: Detected After The Fact
Consequence: FAA: Reviewed Incident With Flight Crew

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Flight Crew Human Performance
Narrative:
AT APPROX XA15 I RECEIVED MY CLRNC TO TAXI TO RWY 29L FROM FAT GND. THIS IS THE USUAL CLRNC AND I PROCEEDED TO TAXI TO RWY 29L. 1/2 WAY DOWN TXWY B, GND CALLED AND SAID TO TAXI TO RWY 29R TO AVOID A LONGER WAKE TURB HOLD FROM A DEPARTING B757. I READ BACK THE NEW CLRNC TO RWY 29R. THIS IS WHERE THE PROB STARTED. FROM THE NUMEROUS TIMES THAT I'VE FLOWN OUT OF FAT, THE FEW OCCASIONS THAT I HAVE TAKEN OFF FROM RWY 29R HAVE ALWAYS BEEN AT INTXN B2. FOR SOME REASON, IT WAS IN MY MIND THAT RWY 29R STARTED AT TXWY B2. SO MY UNDERSTANDING OF THE NEW CLRNC WAS A CLRNC TO TAXI ACROSS ALL TXWYS AND RWYS AND HOLD SHORT RWY 29R. I PROCEEDED TO TAXI ON TXWY B, TURNED L ONTO TXWY B2, CROSSED RWY 29L AND HELD SHORT OF RWY 29R. AT THIS TIME GND CALLED AND INFORMED ME OF MY 'POSSIBLE PLTDEV.' FACTORS: BECAUSE I THOUGHT I WAS FAMILIAR WITH FAT, I DID NOT HAVE MY ARPT CHART OUT. AFTER GND INFORMED ME OF MY DEV, IT ONLY TOOK 1 QUICK LOOK AT THE ARPT DIAGRAM TO SEE WHERE I WENT WRONG. MY HOME BASE IS ZZZ. THEY ALSO HAVE PARALLEL RWYS, BUT THEIR THRESHOLDS START AT THE SAME POINT. YOU HAVE TO CROSS ONE RWY TO TAKE OFF ON THE OTHER. THIS MIGHT HAVE PUT ME IN THE MIND SET THAT I HAD TO CROSS RWY 29L TO GET TO RWY 29R AT FAT. AT THE TIME FAT GND GAVE ME THE NEW CLRNC TO TAXI TO RWY 29R, I WAS DOING MY WT AND BAL AND MY BEFORE TKOF CHKLIST. I DIDN'T PUT AS MUCH THINKING INTO THE NEW CLRNC AS I SHOULD HAVE. IF GND CTL HAD SAID 'CONTINUE ON TXWY B TO RWY 29R,' THAT MIGHT HAVE CLICKED SOMETHING IN MY BRAIN REGARDING HOW TO GET TO RWY 29R. HOWEVER, I DON'T THINK THEY COULD HAVE FORESEEN WHAT I DID FROM THE SIMPLE INSTRUCTION 'TAXI TO RWY 29R.' IRONICALLY, I HAD JUST READ A 3-STEP PROGRAM TO PREVENT RWY INCURSIONS THE DAY BEFORE THIS OCCURRENCE: 1) HAVE ARPT DIAGRAM OUT, 2) LOOK AT THE ROUTING, 3) WHEN IN DOUBT -- ASK. THIS COULD HAVE BEEN AVOIDED HAD I DONE ANY ONE OF THE PREVIOUS.

Synopsis: 
Piper PA31 cargo plt mistakenly followed taxi rte he knew of instead of following gnd ctrl's clrnc.
Time
Date : 200111
Day : Sat
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : ORD.Airport
State Reference : IL

Aircraft / 1
Controlling Facilities.Tower : ORD.Tower
Operator.Common Carrier : Air Carrier
Make Model : B737 Undifferentiated or Other Model
Mission : Passenger
Flight Phase.Ground : Position And Hold

Aircraft / 2
Controlling Facilities.Tower : ORD.Tower
Operator.Common Carrier : Air Carrier
Make Model : B737 Undifferentiated or Other Model
Mission : Passenger
Flight Phase.Landing : Roll

Aircraft / 3
Controlling Facilities.Tower : ORD.Tower
Operator.Common Carrier : Air Carrier
Make Model : Stratoliner 720
Mission : Passenger
Flight Phase.Climbout : Takeoff

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
ASRS Report : 529456

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 4
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 5
Function.Controller : Local

Events
Anomaly.Inflight Encounter : Wake Turbulence
Anomaly.Non Adherence : Published Procedure
Anomaly.Non Adherence : Required Legal Separation
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 4
Resolutory Action.Flight Crew : Exited Adverse Environment
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Controller : Issued Advisory
Consequence.FAA : Reviewed Incident With Flight Crew
Supplementary
Problem Areas: Aircraft
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Narrative:

Synopsis:
B737, READY FOR DEP, OBSERVES WAKE TURB EVENT WITH LNDG B737 ON RWY 27R FROM A B767 DEPARTING RWY 32R. QUESTION TO ORD LCL CTLR LESS THAN APPROPRIATE FOR THE INCIDENT.
**ACN: 529793**

**Time**
- Date: 200110
- Day: Thu
- Local Time Of Day: 0601 To 1200

**Place**
- Locale Reference.Airport: SYR.Airport
- State Reference: NY
- Altitude.MSL.Single Value: 8000

**Environment**
- Flight Conditions: VMC
- Ceiling: CLR

Aircraft / 1
- Controlling Facilities: TRACON: SYR.TRACON
- Operator: General Aviation: Personal
- Make Model: PA-34-200 Seneca I
- Mission: Pleasure
- Flight Phase: Cruise: Level

Aircraft / 2
- Controlling Facilities: TRACON: SYR.TRACON
- Operator: General Aviation: Personal
- Make Model: Cessna 310/T310c
- Flight Phase: Cruise: Level

Person / 1
- Function: Flight Crew: Single Pilot
- Experience: Flight Time: Total: 2300
- Experience: Flight Time: Last 90 Days: 35
- Experience: Flight Time: Type: 1500
- ASRS Report: 529793

Person / 2
- Function: Flight Crew: Single Pilot

Person / 3
- Function: Controller: Approach

**Events**
- Anomaly.Conflict: Airborne Critical
- Anomaly.Inflight Encounter: Wake Turbulence
- Anomaly.Non Adherence: Published Procedure
- Independent Detector.Other.ControllerB: 3
- Independent Detector.Other.Flight CrewA: 1
- Resolutory Action.Controller: Issued Advisory
- Consequence.Other: Emotional Trauma

**Supplementary**
- Problem Areas: Airspace Structure
- Problem Areas: ATC Human Performance
I HAVE ABOUT 30 YRS OF EXPERIENCE, MOST OF THE LAST 20 YRS ON IFR FLT PLANS. ON OCT/XA/01 AT ABOUT XA00, I WAS SBOUND FROM WATERTOWN, NY, TO HILTON HEAD, SC, IN MY SENECA II AT 8000 FT ON AN IFR FLT PLAN. THE WX WAS CAVU AND I WAS JUST S OF SYR VOR WHEN SYR DEP TOLD ME TO TURN L FOR TFC. THEY NEVER TOLD ME THE LOCATION, DIRECTION OR ALT OF THE TFC, WHICH IS VERY UNUSUAL. I ASSUMED THE TFC WAS GOING TO PASS OFF MY R SIDE SINCE I HAD BEEN TURNED TO THE L. WITHIN ABOUT 30 SECONDS, A LIGHT TWIN PASSED FROM L TO R DIRECTLY IN FRONT OF ME AT THE SAME ALT AND SO CLOSE THAT I BOUNCED THROUGH HIS WAKE TURB. WE ALL KNOW THAT WINGTIP VORTICES BLOW DOWN AND DSEND SO I WAS THAT CLOSE TO THIS ACFT. I WAS VISIBLY SHAKEN KNOWING THAT THE ACCIDENT WOULD HAVE BEEN FATAL FOR THE OCCUPANTS OF BOTH ACFT. EVEN THOUGH I MAINTAIN VIGILANCE IN THE COCKPIT, I WOULD NOT HAVE HAD ENOUGH TIME TO TAKE EVASIVE MANEUVERS, ESPECIALLY IN LIGHT OF THE FACT THAT I WAS SEARCHING THE SKY TO THE R OF CTR. A WRONG ASSUMPTION. NEGLECTING TO TELL ME THE LOCATION OF MY TFC COMPOUNDED THE PROB WHICH WAS DEVELOPING VERY QUICKLY. I FILED AN IFR FLT PLAN FOR ALL MY TRAVELS THINKING THAT 2 SETS OF EYES ARE BETTER THAN 1. IN THIS CASE, PARTIAL RELIANCE ON SYR DEP ALMOST COST ME MY LIFE. I FEEL THAT THERE WAS NO EXCUSE FOR THIS ERROR. GIVEN A CHOICE, I WOULD GLADLY HAVE DONE A 180 DEG TO NBOUND FOR A FEW MINS RATHER THAN RISK THIS ACCIDENT.

Synopsis:
A CLOSE ENCOUNTER BTWN GA ACFT.
Time
Date: 200111
Day: Wed
Local Time Of Day: 1801 To 2400

Place
State Reference: WV
Altitude.MSL.Single Value: 25000

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.ARTCC: ZDC.ARTCC
Operator.General Aviation: Corporate
Mission: Passenger
Flight Phase.Cruise: Level

Aircraft / 2
Controlling Facilities.ARTCC: ZDC.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Cruise: Level

Person / 1
Function.Flight Crew: First Officer
Experience.Flight Time.Total: 5950
Experience.Flight Time.Last 90 Days: 75
Experience.Flight Time.Type: 1100
ASRS Report: 529874

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Radar

Events
Anomaly.Altitude Deviation: Excursion From Assigned Altitude
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Other Anomaly: Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Flight Crew: Overrode Automation
Resolutory Action.Flight Crew: Regained Aircraft Control
Resolutory Action.Flight Crew: Returned To Assigned Altitude
Consequence.FAA: Reviewed Incident With Flight Crew

Supplementary
Problem Areas: Aircraft
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
DURING CRUISE PORTION OF FLT, LEVEL AT FL250, THE OTHER PLT AND I WERE TALKING. IN LESS THAN 1 SECOND, THE AIRPLANE WENT INTO A 70 DEG HARD L BANK. THE AUTOPLT KICKED OFF AND THE PF RECOVERED TO LEVEL. 10 SECONDS OR LESS PASSED THEN IT WENT INTO A HARD R BANK, TO PROBABLY 50 DEGS BANK. OUR FLT ATTENDANT WAS UP SERVING DRINKS, SHE WAS KNOCKED TO THE FLOOR. I THEN NOTICED AN ACFT ROUGHLY 10 MI IN FRONT OF US ON TCASII AT OUR ALT. I TOLD THE CTLR ABOUT WHAT HAD JUST HAPPENED. HE RESPONDED AS IF IT WAS NO BIG DEAL! AND THAT WE WERE 12 MI IN-TRAIL OF A B757. I REQUESTED A DIFFERENT ALT, BUT HE STARTED THE B757 DOWN. THE PAX WERE VISIBLY SHAKEN BUT OKAY. THE FLT ATTENDANT WAS UNINJURED.

Synopsis:
HS25 FLC ENCOUNTER WAKE TURB ROLLS WHEN IN-TRAIL AT FL250 UNDER ZDC CTL.
ACN: 529879

Time
Date: 01/11/2001
Day: Wed
Local Time Of Day: 1801 To 2400

Place
Locale Reference: Airport: CYYZ
State Reference: ON

Aircraft / 1
Controlling Facilities: Tower: CYYZ
Operator: Common Carrier: Air Carrier
Make Model: MD-80 Super 80
Mission: Passenger
Flight Phase: Descent: Approach
Flight Phase: Descent: Intermediate Altitude

Aircraft / 2
Controlling Facilities: Tower: CYYZ
Operator: Common Carrier: Air Carrier
Make Model: B747 Undifferentiated or Other Model
Mission: Passenger
Flight Phase: Ground: Takeoff Roll

Person / 1
Function: Oversight: PIC
Function: Flight Crew: Captain
ASRS Report: 529878

Person / 2
Function: Flight Crew: First Officer

Person / 3
Function: Oversight: PIC
Function: Flight Crew: Captain

Person / 4
Function: Controller: Local

Person / 5
Function: Controller: Supervisor

Events
Anomaly: Ground Encounters: FOD
Anomaly: Conflict: Ground Less Severe
Anomaly: Inflight Encounter: Wake Turbulence
Anomaly: Non Adherence: Published Procedure
Anomaly: Non Adherence: Required Legal Separation
Independent Detector: Other: Controller A: 4
Independent Detector: Other: Flight Crew A: 1
Resolutory Action: Flight Crew: Took Precautionary Avoidance Action
Consequence: FAA: Reviewed Incident With Flight Crew

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
ON A 4 MI FINAL RWY 5 CYYZ, TWR ADVISED THEY WOULD ROLL A B747 PRIOR TO OUR LNDG CLRNC. LESS THAN 1 MI, CLRED TO LAND WITH B747 STILL ON RWY. AT 200 FT EXPERIENCE MODERATE TURB ACCOMPANIED BY WING ROLL. ALSO, A CONSIDERABLE AMOUNT OF DEBRIS WAS AIRBORNE. ON ROLLOUT, I ADVISED TWR THAT THE SEPARATION WAS INADEQUATE FOR THIS TYPE OF OP. THE CTLR INDICATED THAT'S WHAT WAS BEING REQUIRED BY HIS SUPVR. I CALLED THE TWR AND FILED A COMPLAINT. I HAD CONSIDERED A GAR, HOWEVER, DUE TO THE CLOSE PROX OF B747, THOUGHT LNDG WAS MORE SAFE DESPITE CONDITIONS. I THOUGHT THE TWR EXERCISED POOR JUDGEMENT IN SEPARATION. IN MY OPINION THIS CRAMMING CAUSED AN UNSAFE CONDITION.

Synopsis:
S80 LANDS AT CYYZ WITHOUT A GAR EVEN THOUGH THERE APPEARS LTSS FROM A DEPARTING B747.
ACN: 531825

Time
Date: 200112
Day: Tue
Local Time Of Day: 1201 To 1800

Place
Locale Reference. Airport: ORD.Airport
State Reference: IL
Altitude.AGL.Single Value: 0

Aircraft / 1
Controlling Facilities. Tower: ORD.Tower
Operator. Common Carrier: Air Carrier
Make Model: MD-80 Super 80
Mission: Passenger
Flight Phase. Ground: Position And Hold

Aircraft / 2
Controlling Facilities. Tower: ORD.Tower
Operator. Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use. Other: FMS or FMC
Flight Phase. Climb Out: Takeoff

Person / 1
Function. Oversight: PIC
Function. Flight Crew: Captain
ASRS Report: 531825

Person / 2
Function. Flight Crew: First Officer

Person / 3
Function. Controller: Local

Person / 4
Function. Oversight: PIC
Function. Flight Crew: Captain

Events
Anomaly. Inflight Encounter: Wake Turbulence
Anomaly. Non Adherence: Clearance
Independent Detector. Other. Controller A: 3
Resolutory Action. Controller: Issued New Clearance
Consequence. Other: Company Review

Supplementary
Problem Areas: Airport
Problem Areas: ATC Facility
Problem Areas: ATC Human Performance
Problem Areas: Flight Crew Human Performance
Narrative:
DEPARTING RWY 22R AT ORD. WE WERE MOVED AHEAD OF SEVERAL ACFT TO MEET A RELEASE TIME OF XB01Z. A COMPANY B757 WAS CLRED TO GO BEFORE US AND WE WERE TOLD TO BE READY. ACFT WERE LNDG ON RWY 27L AND I KNOW ORD TWR HAD TO TIME THIS WELL FOR DEPS. WE WERE CLRED FOR TKOF WITH THE DEPARTING B757 JUST CLBING OUT OF 1500 FT ON OUR TCAS. I DECLINED TKOF CLRNC AND WAS TOLD THAT WE MIGHT MISS OUR RELEASE TIME. THIS WAS AT XA59, TWO MINS BEFORE OUR PREVIOUSLY STATED RELEASE TIME. I KNOW THE FOLKS AT ORD ARE DOING THEIR BEST TO KEEP THINGS MOVING HOWEVER REDUCING STDs JUST TO MAKE A RELEASE TIME JUST DOESN'T CUT IT. SAFETY FIRST.

Synopsis:
AN MD80 CREW, CONCERNED ABOUT WAKE TURB OF PREVIOUSLY DEPARTED ACFT AT KORD, REFUSED TKOF CLRNC.
Time
Date: 200112
Day: Fri
Local Time Of Day: 0601 To 1200

Place
Locale Reference.Airport: DFW Airport
State Reference: TX
Altitude.MSL.Single Value: 6000

Aircraft / 1
Controlling Facilities.TRACON: D10.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Climbout: Intermediate Altitude
Route In Use.Departure: On Vectors

Aircraft / 2
Controlling Facilities.TRACON: D10.TRACON
Make Model: Skylane 182/Rg Turbo Skylane/Rg
Mission: Tactical
Flight Phase.Cruise: Holding

Aircraft / 3
Controlling Facilities.TRACON: D10.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B767-300
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Climbout: Intermediate Altitude

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
ASRS Report: 532704

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Controller: Departure

Person / 4
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 5
Function.Oversight: PIC
Function.Flight Crew: Captain

Events
Anomaly.Conflict: Airborne Critical
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Published Procedure
Independent Detector.Aircraft Equipment: TCAS
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.None Taken: Insufficient Time
Consequence.FAA: Reviewed Incident With Flight Crew
Supplementary

Problem Areas : ATC Human Performance
Problem Areas : Flight Crew Human Performance

Narrative:
ON DEP FROM DFW ATC VECTORED US CLOSE TO VFR TFC AT 6500 FT BTWN DFW AND FTW APPROX 9 MI W OF DFW. WE WERE RESTR TO 6000 FT ABOUT A 270 DEG HDG WHEN THE CESSNA TURNED TO THE R AND PASSED WITHIN A HALF MI TO OUR L AND 500 FT ABOVE CAUSING 2 RA'S ON TCASII. AFTER GIVEN A FREQ CHANGE I ASKED DEP WHY THE CESSNA WAS THERE IN ORBIT. HE STATED IT WAS FOR LAW ENFORCEMENT. BEFORE LEAVING FREQ I HEARD 2 OTHER ACFT RECEIVE VECTORS AND ALT RESTRS TO AVOID HIM. I RECOMMEND THAT THE DEP CORRIDOR BE KEPT CLR OF SUCH TFC. OUR FLT ENCOUNTERED A MODERATE WAKE TURB EVENT WHILE AT 6000 FT AFTER PASSING THE TFC. WE WOULD NOT HAVE ENCOUNTERED IT IN CLB. THE WAKE WAS FROM A HVY B767-300ER TO HNL WHO WAS 13 DME AHEAD.

Synopsis:
A B757 CREW, RESTR TO 6000 FT, DEPARTING DFW, RECEIVED A TCASII RA.
ACN: 533846

Time
Date: 200112
Day: Tue
Local Time Of Day: 1201 To 1800

Place
State Reference: TX
Altitude.MSL.Single Value: 8000

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities.TRACON: D10.TRACON
Operator.Common Carrier: Air Carrier
Make Model: EMB ERA 145 ER&LR
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Climbout: Intermediate Altitude
Route In Use.Departure.SID: dallas.6

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 13000
Experience.Flight Time.Last 90 Days: 150
Experience.Flight Time.Type: 1100
ASRS Report: 533846

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Controller: Departure

Events
Anomaly.Other Spatial Deviation: Track Or Heading Deviation
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Clearance
Anomaly.Non Adherence: Published Procedure
Independent Detector.Other.ControllerB: 3
Resolutory Action.Controller: Issued New Clearance

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Flight Crew Human Performance
Narrative:
DEPARTED DFW FROM RWY 17R BEHIND ANOTHER ACFT (MAYBE MD80 OR F100) WITH USUAL ‘NORMAL’ SEPARATION. I WAS HAND FLYING THE ACFT. DURING CLBOUT ON A 174 DEG HDG (THE DALLAS 6 DEP, I BELIEVE), WE ENCOUNTERED WAKE TURB FROM THE PRECEDING ACFT. THE ROLL UPSET WAS ONLY LIGHT OR SO, BUT ENOUGH THAT IT HAD MY FULL ATTN TRYING TO ESCAPE AND AVOID IT. IT ONLY LASTED SEVERAL SECONDS, BUT THEN WE ENCOUNTERED SOME MORE. DURING THE ENCOUNTERS, ATC ISSUED A L TURN TO 055 DEG HDG. MY FO READ BACK THE CLRNC. THERE WAS NO REPLY OR CORRECTION FROM ATC, NOR DID I HEAR ANOTHER ACFT REPLY. SINCE MY FULL ATTN WAS ON FLYING THE ACFT OUT OF THE WAKE TURB, I HAD TO ASK HIM ‘WHAT WAS THE ASSIGNED HDG?’ HE REPLIED ‘055 DEGS,’ WHICH RANG A BELL FROM WHAT I HEARD IN HIS READBACK TO ATC. AS WE PASSED THROUGH A 090 DEG HDG, ATC SAID ‘ACR X, IT APPEARS YOU TOOK A TURN FOR ANOTHER ACFT. GO BACK TO YOUR TWR ASSIGNED HDG.’ I IMMEDIATELY ROLLED THE ACFT BACK TO THE R. FO SAID HE HEARD OUR CALL SIGN (ACR X) WITH THE TURN INSTRUCTIONS. I ONLY RECALLED HIS READBACK TO THE CLRNC. (I HAVE BEEN FLYING WITH FO THE ENTIRE MONTH. HE HAS DISPLAYED EXCELLENT AND COMPETENT RADIO COM SKILLS. SINCE I DID NOT HEAR THE WHOLE ATC CLRNC, I ASKED HIM WHAT IT WAS. THERE WAS NO REASON TO DOUBT WHAT HE HEARD, AND REPLIED TO.) WE DID NOT ARGUE WITH THE CTLR. PRIOR TO REACHING THE 174 DEG HDG, ATC TURNED US TO MAYBE 080 DEGS (I DON'T REMEMBER) AND HANDED US OFF. DURING THE TURNS THERE WAS NO KNOWN TFC CONFLICTS THAT WE COULD SEE. (TCASII DID NOT SHOW ANY ACFT CLOSE BY.) AS FAR AS WE KNOW, NO OTHER ACFT WERE TURNED BECAUSE OF US. MAYBE I WANTED TO BELIEVE THE TURN WAS FOR US. WE WERE ENCOUNTERING TURB. IT WAS THE DIRECTION OF OUR DEST. LIGHT TFC. TRUST IN AN EXCELLENT FO. MAYBE THE CTLR DID SAY OUR CALL SIGN. I'VE HEARD THEM USE WRONG CALL SIGNS TOO, BUT I DON'T RECALL THE INITIAL CLRNC.

Synopsis:
AN ACR TAKES A CLRNC FOR A HDG CHANGE MEANT FOR ANOTHER ACFT.
ACN: 534041

Time
Date: 200201
Day: Thu
Local Time Of Day: 1801 To 2400

Place
Locale Reference.Airport: LAS.Airport
State Reference: NV
Altitude.AGL.Single Value: 20

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.Tower: LAS.Tower
Make Model: B737-300
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Arrival: Profile Descent
Route In Use.Approach: Visual

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Last 90 Days: 200
ASRS Report: 534041

Person / 2
Function.Flight Crew: First Officer
Experience.Flight Time.Total: 7000
Experience.Flight Time.Last 90 Days: 140
Experience.Flight Time.Type: 3000
ASRS Report: 534792

Person / 3
Function.Maintenance: Technician

Events
Anomaly.Inflight Encounter: Turbulence
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Other Anomaly: Loss Of Aircraft Control
Consequence.Other: Aircraft Damaged
Consequence.Other: Flight Cancelled

Supplementary
Problem Areas: Flight Crew Human Performance
Narrative:
WE WERE MAKING AN APCH IN VMC, ON PROFILE AND SPD. WE WERE VISUALLY FOLLOWING A B757. WE TRIED TO STAY 4-5 MI BEHIND THE B757. THE ONLY EVIDENCE OF ANY WAKE WAS AT ABOUT 500 FT AGL. IT WAS MINOR AND MOMENTARY. AT ABOUT 20 FT AGL, ON SPD AND SPOOLED APPROX, THE SPD DROPPED OFF FROM A NORMAL SPD OF ‘REF +5 KTS’ TO ‘REF -2 KTS.’ I WAS THE PNF. I CALLED OUT ‘REF.’ THE FO IMMEDIATELY ADDED PWR AND ATTEMPTED TO PITCH DOWN THE AIRPLANE AND NOT RESPOND AS WE WOULD HAVE EXPECTED, BUT PITCHED UP INSTEAD. MORE PWR WAS ADDED. ACFT TOUCHED DOWN, BALLOONED BACK UP ABOUT 5 FT, THEN TOUCHED DOWN AGAIN. NEITHER TOUCHDOWN WAS WITH EXCESSIVE FORCE. THE REST OF THE ROLLOUT AND TAXI TO GATE WAS UNEVENTFUL. UPON POSTFLT WALKAROUND, EVIDENCE OF A TAIL STRIKE WAS SEEN. MECHS TOOK THE ACFT OTS. WE SUBMITTED TO DRUG AND ALCOHOL TESTS AND WERE REMOVED FROM DUTY. BECAUSE THE APCH WAS A TEXTBOOK APCH TO 20 FT, THEN FELL APART SO QUICKLY, I BELIEVE SOME RESIDUAL WAKE MAY HAVE BEEN CAUSAL.

Synopsis:
B737-300 FO LOST AIRSPD DURING LNDG TOUCHDOWN AND BOUNCED INTO THE AIR FOR ANOTHER LNDG RESULTING IN A TAIL STRIKE AND MAINT REMOVING IT FROM SVC. FLC BELIEVE THAT THE ACFT WAS CAUGHT IN WAKE TURB OF A PRECEDING B757.
Time
Date: 200201
Day: Wed
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: DEN.Airport
State Reference: CO
Altitude.MSL.Single Value: 7000

Aircraft / 1
Controlling Facilities.TRACON: D01.TRACON
Operator.Common Carrier: Air Carrier
Make Model: A300
Mission: Passenger
Flight Phase.Descent: Approach
Route In Use.Approach: Visual

Aircraft / 2
Controlling Facilities.TRACON: D01.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Descent: Approach

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
ASRS Report: 534161

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Controller: Approach

Person / 4
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 5
Function.Controller: Local

Events
Anomaly.Conflict: Airborne Less Severe
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Clearance
Anomaly.Non Adherence: Published Procedure
Anomaly.Non Adherence: Required Legal Separation
Anomaly.Other Anomaly: Speed Deviation
Independent Detector.Other.Controller: 3
Independent Detector.Other.Flight Crew: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Controller: Issued Advisory
Resolutory Action.None Taken: Anomaly Accepted
Resolutory Action.None Taken: Detected After The Fact
Consequence.FAA: Reviewed Incident With Flight Crew

Supplementary
Problem Areas: Aircraft
Problem Areas : ATC Human Performance

Narrative:
CLRED FOR THE VISUAL RWY 16, MAINTAIN 170 KTS UNTIL THE FAF, CAUTION WAKE TURB FOLLOWING A B757. WE TURNED FINAL A FEW MI OUTSIDE THE FAF. IT APPEARED WE WERE CATCHING THE B757. WE BEGAN TO SLOW. THIS REQUIRED GETTING THE GEAR DOWN, RUNNING CHKLISTS, AND LOWERING FLAPS. DURING THE PROCESS, ATC INQUIRED ABOUT OUR SPD. I TOLD HIM WE WERE SLOWING FOR WAKE. HE TOLD US THAT WE WERE 5 MI IN TRAIL. HE ALSO SAID WE HAD A REQUIREMENT TO FLY 170 KTS AND IT WAS OUR RESPONSIBILITY TO NOTIFY HIM BEFORE SLOWING. AS DIRECTED, WE CHANGED OVER TO TWR. I INQUIRED OUR DISTANCE TO THE B757. THE TWR STATED 4 MI. WE HAD A RESPONSIBILITY FOR WAKE TURB SEPARATION. WE WERE BUSY FLYING THE ACFT. THE COM DIDN'T OCCUR BECAUSE OF THE WORKLOAD.

Synopsis:
A B737-300 FLC SLOWS BELOW THE ASSIGNED AIRSPD OF 170 KTS ON APCH AS THEY OBSERVE THAT THEY ARE GAINING ON A B757 WHICH IS 4-5 MI AHEAD ON A VISUAL APCH TO RWY 16 AT DEN, CO.
ACN: 534985

Time
  Date: 200201
  Day: Wed
  Local Time Of Day: 1201 To 1800

Place
  State Reference: CA
  Altitude MSL Single Value: 1500

Environment
  Flight Conditions: VMC

Aircraft / 1
  Controlling Facilities TRACON: O90.TRACON
  Operator Common Carrier: Air Carrier
  Make Model: DC-10 Undifferentiated or Other Model
  Mission: Freight
  Flight Phase: Descent: Approach
  Route In Use: Approach: Charted Visual

Aircraft / 2
  Controlling Facilities TRACON: O90.TRACON
  Operator Common Carrier: Air Carrier
  Make Model: Brasilia EMB-120 All Series
  Mission: Passenger
  Flight Phase: Descent: Approach

Person / 1
  Function: Oversight: PIC
  Function: Flight Crew: Captain
  Experience: Flight Time Total: 12000
  Experience: Flight Time Last 90 Days: 150
  Experience: Flight Time Type: 2500
  ASRS Report: 534985

Person / 2
  Function: Flight Crew: First Officer
  Experience: Flight Time Total: 4550
  Experience: Flight Time Last 90 Days: 120
  Experience: Flight Time Type: 150
  ASRS Report: 535282

Person / 3
  Function: Oversight: PIC
  Function: Flight Crew: Captain

Person / 4
  Function: Controller: Approach

Person / 5
  Function: Controller: Local

Events
  Anomaly: Conflict: Airborne Less Severe
  Anomaly: Inflight Encounter: Wake Turbulence
  Anomaly: Non Adherence: Published Procedure
  Anomaly: Non Adherence: Required Legal Separation
  Independent Detector Other: ControllerA: 5
  Independent Detector Other: Flight CrewA: 1
  Resolutory Action: Flight Crew: Became Reoriented
Resolutory Action. Flight Crew: Took Precautionary Avoidance Action
Resolutory Action. Controller: Issued Advisory
Resolutory Action. Controller: Issued New Clearance

Supplementary
- Problem Areas: Airport
- Problem Areas: ATC Human Performance
- Problem Areas: Environmental Factor
- Problem Areas: Flight Crew Human Performance
Narrative:
ON QUIET BRIDGE VISUAL APCH TO RWY 28R AT SFO. WE WERE CLRED FOR THE APCH AND TOLD WE HAD TFC GOING TO RWY 28L THAT HAD US IN SIGHT. APPROX 5 MI OUT, TFC WAS AGAIN CALLED OUT AND I WAS TOLD TO CONTACT TWR. I TOLD APCH THAT I PROBABLY COULDN'T SEE THE TFC BECAUSE I WAS LOOKING FOR IT DIRECTLY INTO THE SUN. THEN SAW THE ACFT, RPTED SEEING IT, AND WAS TOLD TO MAINTAIN VISUAL SEPARATION AND AGAIN TO CONTACT TWR. WHEN I CONTACTED TWR, I WAS TOLD NOT TO PASS THE ACFT ON APCH TO RWY 28L. I RESPONDED THAT I WAS UNABLE TO KEEP FROM PASSING THAT ACFT. I WAS THEN CLRED TO LAND AND I LANDED WITHOUT FURTHER INCIDENT. AFTER VISUALLY ACQUIRING THE TFC, IN MY JUDGEMENT, WE WERE NOT SO CLOSE AS TO CREATE A COLLISION HAZARD. IN HINDSIGHT, I NOW BELIEVE MY WAKE TURB COULD POSSIBLY HAVE CAUSED A PROB FOR THE SMALLER ACFT. THE DISTRICT OF LOOKING TO ACQUIRE THE OTHER ACFT VISUALLY, WHILE FLYING THE APCH PROC, AND RUNNING CHKLIST CAUSED ME TO BE SOMEWHAT LATE IN CONFIGURING AND SLOWING MY ACFT, WHICH ACCENTUATED THE SPD DISPARITY BTWN THE 2 AIRPLANES. ANOTHER CONTRIBUTING FACTOR WAS THAT WE WERE NEVER GIVEN ANY SPD ADVISORIES WITH THE OTHER ACFT, OR ASSIGNED ANY SPD TO FLY DURING THE APCH. THIS WOULD HAVE ALLOWED FOR BETTER SEQUENCING OF THE 2 ACFT. TO PREVENT A FUTURE OCCURRENCE OF AN EVENT SIMILAR TO THIS, I WOULD SUGGEST BETTER SPD ADVISORIES FROM ATC, ESPECIALLY IF AN ACFT DOESN'T HAVE VISUAL CONTACT ON OTHER TFC UNTIL BEING SO CLOSE TO THE ARPT. SUPPLEMENTAL INFO FROM ACN 535282: EVEN IF WE HAD SLOWED/CONFIGURED EARLIER WE WOULD HAVE STILL PASSED THE SLOWER COMMUTER SOMEWHERE DOWN FINAL. WHEN WE OVERTOOK HE ADVISED THAT HE COULD REMAIN VISUAL SEPARATED FROM US. THE BASIC PROB HERE WAS SEQUENCING OF VERY DIFFERENT ACFT. THE SUN ANGLE AND THE COM HDOF BTWN APCH AND TWR RIGHT AS BOTH ACFT CONVERGED JUST COMPLICATED THE PROB.

Synopsis:
TURNING ONTO SFO RWY 28R FINAL FOR A VISUAL APCH, DC10 WAS TOLD NOT TO PASS E120 INBOUND FOR RWY 28L. AFTER ADVISING ‘UNABLE,’ DC10 CLRED TO LAND.
ACN: 535846

Time
Date: 200201
Day: Mon
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: DFW.Airport
State Reference: TX

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities.Tower: DFW.Tower
Operator.Common Carrier: Air Carrier
Make Model: A300
Mission: Passenger
Flight Phase.Climbout: Intermediate Altitude

Aircraft / 2
Controlling Facilities.Tower: DFW.Tower
Operator.Common Carrier: Air Carrier
Make Model: A300
Mission: Passenger
Flight Phase.Ground: Takeoff Roll
Flight Phase.Climbout: Intermediate Altitude
Flight Phase.Climbout: Takeoff

Aircraft / 3
Operator.Common Carrier: Air Carrier
Make Model: MD-80 Series (DC-9-80) Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Climbout: Intermediate Altitude

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
ASRS Report: 535886

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Local

Person / 5
Function.Controller: Departure

Events
Anomaly.Conflict: Airborne Less Severe
Anomaly.Conflict: Ground Less Severe
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Published Procedure
Anomaly.Non Adherence: Required Legal Separation
Independent Detector.Other.ControllerA: 3
Independent Detector.Other.ControllerB: 4
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Took Precautionary Avoidance Action
Resolutory Action.Controller : Issued New Clearance

Supplementary
Problem Areas : ATC Human Performance
Narrative:
TWR FOR RWY 18L WAS PUMPING THE ACFT OUT WITH VERY CLOSE SPACING. WE WERE JUST MAKING THE TURN INTO POS WHEN CLRED FOR TKOF. THE MD80 AHEAD OF US WAS JUST AT THE 1000 FT MARKERS ON THE RWY, NOWHERE NEAR HIS ROTATION POINT. WE TOOK OUR TIME FOR A LITTLE MORE SPACING, BUT AFTER TKOF, WE WERE RIGHT IN HIS WAKE. ASKED DEP FOR A BIT OF A TURN L OR R TO GET OUR OF THE WAKE. THEY GAVE US 5 DEGS L. SPACING WAS TOO CLOSE.

Synopsis:
B737-300 CREW DEPARTING DFW RECEIVED WAKE TURB FROM AN MD80 OFF AHEAD AND FELT SPACING WAS INSUFFICIENT.
Time
Date: 200201
Day: Thu
Local Time Of Day: 1801 To 2400

Place
State Reference: AZ
Altitude.MSL.Single Value: 31000

Environment
Flight Conditions: IMC

Aircraft / 1
Controlling Facilities.ARTCC: ZAB.ARTCC
Operator.General Aviation: Corporate

Aircraft / 2
Controlling Facilities.ARTCC: ZAB.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: B767 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Cruise: Enroute Altitude Change

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 11800
Experience.Flight Time.Last 90 Days: 60
Experience.Flight Time.Type: 4000
ASRS Report: 536904

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Radar

Events
Anomaly.Inflight Encounter: Wake Turbulence
Independent Detector.Other.ControllerA: 4
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Flight Crew: Exited Adverse Environment
Resolutory Action.Controller: Issued New Clearance

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Flight Crew Human Performance
Problem Areas: Weather
Narrative:
WE WERE APPROX 20 MI IN TRAIL TO A B767 HVY IN AND OUT OF CLOUDS. BOTH OF US HAD BEEN CLRED FOR A DSCNT TO FL310. APPARENTLY WE DSNDED AT A HIGHER RATE AND REACHED FL310 FIRST. AT SOME POINT OUR LEVEL FLT PATH CROSSED THEIR DSNDED FLT PATH AND WE FLEW THROUGH THEIR WAKE TURB. WE WERE ROLLED APPROX 80 DEGS TO THE R AND THE AUTOPLT DISENGAGED. WE REGAINED CTL AND HAD GAINED APPROX 200 FT IN ALT. WE DID NOT SEE THE ACFT VISUALLY DUE TO CLOUDS AND OUR TCASII DID NOT SHOW IT DUE TO ITS 12 NM RANGE. THE CTLR WAS SURPRISED WE HAD WAKE TURB AND AGREED TO OUR REQUEST FOR AN OFFSET OF 5 MI AND THEN A 'DIRECT TO' OUR FORMER FIX. WE WERE CONCERNED THROUGHOUT THE ARR BECAUSE WE CONTINUED BEHIND THE B767 ALONG THE SAME ARR RTE WITH THE SAME XING ALTS AND SPDS, BUT WE GOT NO FURTHER TURB. ALL PAX WERE BELTED, BUT FLT ATTENDANT THROWN TO FLOOR, NO INJURIES.

Synopsis:
CL60 DSNDED SIMULTANEOUSLY WITH A B767 20 MI AHEAD TO FL310 ENCOUNTERS SEVERE WAKE TURB.
Time
Date: 200208
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: LAX.Airport
State Reference: CA

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities.TRACON: SCT.TRACON
Controlling Facilities.Tower: LAX.Tower
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Approach: Instrument Precision

Aircraft / 2
Controlling Facilities.TRACON: SCT.TRACON
Controlling Facilities.Tower: LAX.Tower
Operator.General Aviation: Corporate
Make Model: Commercial Fixed Wing
Mission: Passenger
Flight Phase.Descent: Approach

Aircraft / 3
Controlling Facilities.TRACON: SCT.TRACON
Controlling Facilities.Tower: LAX.Tower
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Approach: Instrument Precision

Component / 1
Aircraft Component: Traffic Collision Avoidance System (TCAS)
Aircraft Reference: X

Person / 1
Function.Flight Crew: First Officer
Experience.Flight Time.Total: 5000
Experience.Flight Time.Last 90 Days: 200
Experience.Flight Time.Type: 1500
ASRS Report: 537712

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Oversight : PIC
Function.Flight Crew : Captain

**Person / 6**
Function.Controller : Local

**Person / 5**
Function.Controller : Approach

**Events**
Anomaly.Conflict : NMAC
Anomaly.Inflight Encounter : Wake Turbulence
Anomaly.Non Adherence : FAR
Anomaly.Non Adherence : Required Legal Separation
Independent Detector.Aircraft Equipment : TCAS
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Took Evasive Action
Resolutory Action.Controller : Issued Advisory

**Supplementary**
Problem Areas : Airspace Structure
Problem Areas : ATC Human Performance
Problem Areas : Environmental Factor
Problem Areas : Flight Crew Human Performance
Narrative:
WE WERE ON APCH TO LAX RWY 25L. AT ABOUT 25-30 MI OUT, WE WERE GIVEN A TFC CALL FOR A COMMUTER FLT 11 O'CLOCK POS AND AT 10 MI. WE SEARCHED BUT DID NOT SEE THE TFC. THE COMMUTER FLT CALLED 'TFC IN SIGHT.' WHAT I NOW REALIZE MUST HAVE HAPPENED, THE COMMUTER ACFT SAW THE B757 WHO WAS AT 3 1/2 MI IN FRONT OF US. ABOUT 1 MIN AFTER THIS EXCHANGE, OUR B757 ENCOUNTERED THE WAKE TURB OF THE B757 IN FRONT OF US. OUR AUTOPLT DISENGAGED AND I PROCEEDED TO HAND FLY THE APCH. I ELEVATED 1/2 DOT ABOVE GLIDE PATH TO GET OUT OF WAKE TURB. SINCE I WAS HAND-FLYING, MY OUTSIDE SCAN WAS DEGRADED. A MIN OR TWO LATER WE GOT A TCASII WARNING. THE DISPLAY SHOWED AN ACFT SLIGHTLY AHEAD TO THE L AT 500 FT SEPARATION. WE SEARCHED BUT DID NOT SEE THE TFC. WE CALLED TWR AND ASKED IF THERE WAS TFC IN OUR VICINITY. HE RESPONDED 'YES THE COMMUTER.' AT THIS POINT, COMMUTER WAS DIRECTLY ABOVE US WITH TCASII SHOWING 200-300 FT SEPARATION. TCASII CALLED OUT, 'DSND, DSND,' SO WE DSNDED. WE THEN STARTED OPENING FROM TFC. CAPT THOUGHT THE COMMUTER CAPT WAS SHOWING OFF FOR A NEW FO. I NOW REALIZE, HE NEVER SAW US TO BEGIN WITH. SOLUTION: 1 ACFT CALLING TFC IN SIGHT IN A SIT SUCH AS THIS SHOULD NOT RELIEVE ATC OF THEIR TFC SEPARATION RESPONSIBILITIES. ALSO, IF A PLT CALLS TFC IN SIGHT IN THE APCH ENVIRONMENT HE IS WAY TOO BUSY TO STARE AT THAT TFC INDEFINITELY.

Synopsis:
A B757 FLC IS CONFUSED REGARDING TA'S AND DURING A DISTR WITH WAKE TURB ENCOUNTER THEY EXPERIENCE AN NMAC WITH A COMMUTER FLT WHILE ON APCH TO RWY 25L, E OF LAX, CA.
Time
Date: 200203
Day: Sat
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: PVD.Airport
State Reference: RI
Altitude.MSL.Single Value: 21000

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.ARTCC: ZBW.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: B737 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Climbout: Intermediate Altitude

Person / 1
Function.Flight Crew: First Officer
Experience.Flight Time.Total: 6000
Experience.Flight Time.Last 90 Days: 200
Experience.Flight Time.Type: 1000
ASRS Report: 540238

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 3
Function.Controller: Radar

Events
Anomaly. Altitude Deviation: Undershoot
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Clearance
Anomaly.Non Adherence: FAR
Anomaly.Non Adherence: Published Procedure
Independent Detector.Other.ControllerA: 3
Resolutory Action.Flight Crew: Returned To Assigned Altitude
Resolutory Action.Controller: Issued Alert
Consequence.FAA: Reviewed Incident With Flight Crew

Supplementary
Problem Areas: Flight Crew Human Performance
Narrative:
MULTIPLE DISTRACTIONS DURING CLBOUT INCLUDING EMER LEVELOFF BY ATC FOR TFC, ALSO HAD WAKE TURB ON DEP MODERATE TO SEVERE. FIRST LEG WITH NEW CAPT, SHORT FLT (EWR-BOS). GOT TO FILED FLT ALT OF FL210 AND ATC ADVISED WE WERE 400 FT LOW AFTER ABOUT 5 MINS AT THAT ALT. WE HAD BOTH FORGOTTEN TO RESET ONE ALTIMETER TO 29.92. WE BOTH RESET ALTIMETERS AND CLBED TO FL210. LESSON LEARNED: ALL CHARTS READY PRIOR TO DEP AND NO OTHER DUTIES UNTIL AFTER LEVELOFF FOR CRUISE!

Synopsis:
A B737 CREW NEGLECTED TO RESET THEIR ALTIMETERS, PASSING 18000 FT, DURING CLBOUT, RESULTING IN A 400 FT UNDERSHOOT.
ACN: 541863

Time
Date: 200203
Day: Thu
Local Time Of Day: 1801 To 2400

Place
Locale Reference, Airport: LAX.Airport
State Reference: CA
Altitude, AGL, Single Value: 100

Aircraft / 1
Controlling Facilities, Tower: LAX.Tower
Operator, Common Carrier: Air Carrier
Make Model: MD-80 Super 80
Mission: Passenger
Navigation In Use, Other: FMS or FMC
Flight Phase, Descent: Approach
Route In Use, Approach: Visual

Aircraft / 2
Controlling Facilities, Tower: LAX.Tower
Operator, Common Carrier: Air Carrier
Make Model: B747 Undifferentiated or Other Model
Navigation In Use, Other: FMS or FMC
Flight Phase, Descent: Approach
Route In Use, Approach: Visual

Person / 1
Function, Oversight: PIC
Function, Flight Crew: Captain
ASRS Report: 541863

Person / 2
Function, Flight Crew: First Officer

Person / 3
Function, Oversight: PIC
Function, Flight Crew: Captain

Person / 4
Function, Controller: Local

Events
Anomaly, Inflight Encounter: Wake Turbulence
Anomaly, Other Anomaly: Loss Of Aircraft Control
Independent Detector, Other, Flight Crew A: 1
Independent Detector, Other, Flight Crew B: 2
Resolutory Action, Flight Crew:Executed Go Around
Resolutory Action, Flight Crew: Regained Aircraft Control
Resolutory Action, Controller: Issued Advisory
Consequence, Other: Company Review

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
WE WERE CLRED VISUAL APCH TO RWY 24R AT LAX. F0 WAS PLT FLYING. ATC HAD CLRED A B747 TO LAND ON RWY 24L. WE HAD A VISUAL ON THE ARPT AND WITH THE B747. ATC DID ISSUE A CAUTION ABOUT WAKE TURBULENCE FROM THE PRECEDING B747. THE PF DID A GOOD JOB BEING AWARE OF THE WAKE TURB AND FLEW SLIGHTLY HIGH TO STAY ABOVE AND SLOWED THE ACFT TO GAIN ADDED DISTANCE. EVERYTHING WAS GREAT UNTIL 100 FT AGL. WE ENCOUNTERED VERY RAPID ROLLS RIGHT THEN ABRUPTLY L. WE INITIATED A GAR TO ESCAPE THE WAKE TURB AND USED MAX PWR DOING SO. WE BOTH HAVE A GREAT AWARENESS OF THE CONSEQUENCES OF THIS UNSEEN HAZARD. WE DID ALL WE COULD TO AVOID IT. THE PREVAILING WIND MUST HAVE BLOWN THE B747 WAKE DIRECTLY ON OUR LNDG RWY. I INTEND TO GET A FULL 5 MILES BEHIND THIS TYPE HEAVY EVEN IF THE ACFT IS LNDG ON A PARALLEL.

Synopsis:
MD80 FLC ENCOUNTERED WAKE TURBULENCE 100 FT AGL FROM A B747 THAT HAD JUST LANDED AHEAD OF THEM ON A PARALLEL RWY.
ACN: 542015

Time
Date: 200203
Day: Fri
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: BET.Airport
State Reference: AK
Altitude.AGL.Single Value: 200

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities.Tower: BET.Tower
Operator.Common Carrier: Air Taxi
Make Model: PA-31 Navajo Chieftan/Majave/Navajo
Mission: Passenger
Flight Phase.Landing: Go Around
Route In Use.Approach: Visual

Aircraft / 2
Controlling Facilities.Tower: BET.Tower
Operator.Common Carrier: Air Carrier
Make Model: B727-200
Mission: Freight
Flight Phase.Landing: Roll

Person / 1
Function.Flight Crew: Single Pilot
Experience.Flight Time.Total: 14000
Experience.Flight Time.Last 90 Days: 150
Experience.Flight Time.Type: 500
ASRS Report: 542015

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 3
Function.Controller: Local

Events
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Published Procedure
Anomaly.Non Adherence: Required Legal Separation
Anomaly.Other Anomaly: Loss Of Aircraft Control
Independent Detector.Other.ControllerA: 3
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Flight Crew: Executed Go Around
Resolutory Action.Flight Crew: Regained Aircraft Control
Resolutory Action.Controller: Issued New Clearance
Resolutory Action.Controller: Separated Traffic
Consequence.FAA:Reviewed Incident With Flight Crew
Consequence.Other: Emotional Trauma

Supplementary
Problem Areas: ATC Facility
Problem Areas: ATC Human Performance
Problem Areas: Flight Crew Human Performance

Narrative:

Synopsis:
WAKE VORTEX ENCOUNTER AND LOSS OF ACFT CTL IN A PA31-350 WHEN THE PLT IS TOLD BY TWR CTLR TO GO AROUND BECAUSE LNDG B727 HAD NOT YET CLRED RWY 18 AT PABE, AK.
ACN: 542304

Time
Date: 200203
Day: Mon
Local Time Of Day: 1801 To 2400

Place
State Reference: MI
Altitude.MSL.Single Value: 28000

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities.ARTCC: ZOB.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: B737-300
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Cruise: Level

Aircraft / 2
Controlling Facilities.ARTCC: ZOB.ARTCC
Operator.Common Carrier: Air Carrier
Make Model: B747 Undifferentiated or Other Model
Navigation In Use.Other: FMS or FMC
Flight Phase.Cruise: Level

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 6000
Experience.Flight Time.Last 90 Days: 150
ASRS Report: 542304

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Radar

Events
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Other Anomaly: Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Flight Crew: Regained Aircraft Control
Consequence.Other: Maintenance Action

Supplementary
Problem Areas: Aircraft
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
AT CRUISE WITH AUTOPLT ON, WE EXPERIENCED A ROLLING MOTION THAT HAD TO BE MANUALLY CORRECTED WITH AILERON CTL. ACFT BANK REACHED 40 DEGS. SUSPECT A B747 15 MI AHEAD CREATED WAKE TURB THAT CAUSED THE ROLLING MOTION. NO CTL MALFUNCTION INDICATED. NO INJURIES. MAINT NOTIFIED, DEBRIEFED AND A WRITE-UP ENTERED IN THE LOGBOOK.

Synopsis:
B737-300 INVOLUNTARY ROLLED TO 40 DEGS DURING CRUISE AT FL280 WHICH HAD TO BE CORRECTED MANUALLY WITH AILERON AFTER AUTOPLT DISCONNECTED. THERE WAS NO CTL MALFUNCTION INDICATED. FLC SUSPECTED WAKE TURB FROM A B747 15 MI AHEAD.
ACN: 542537

**Time**  
Date: 200203  
Day: Fri  
Local Time Of Day: 1201 To 1800

**Place**  
State Reference: NC  
Altitude.MSL.Single Value: 36500

**Environment**  
Flight Conditions: VMC

**Aircraft / 1**  
Controlling Facilities.ARTCC: ZJX.ARTCC  
Operator.General Aviation: Corporate  
Make Model: Bae 125 Series 1000  
Mission: Business  
Navigation In Use.Other: FMS or FMC  
Flight Phase.Cruise: Enroute Altitude Change  
Route In Use.Enroute: On Vectors

**Aircraft / 2**  
Controlling Facilities.ARTCC: ZJX.ARTCC  
Operator.Common Carrier: Air Carrier  
Make Model: B757-200  
Mission: Passenger  
Flight Phase.Cruise: Level

**Person / 1**  
Function.Oversight: PIC  
Function.Flight Crew: Captain  
Experience.Flight Time.Total: 13250  
Experience.Flight Time.Last 90 Days: 70  
Experience.Flight Time.Type: 550  
ASRS Report: 542537

**Person / 2**  
Function.Flight Crew: First Officer

**Person / 3**  
Function.Oversight: PIC  
Function.Flight Crew: Captain

**Person / 4**  
Function.Controller: Radar

**Events**  
Anomaly.Inflight Encounter: Wake Turbulence  
Independent Detector.Other.ControllerA: 4  
Independent Detector.Other.Flight CrewA: 1  
Independent Detector.Other.Flight CrewB: 2  
Resolutory Action.Flight Crew: Regained Aircraft Control  
Resolutory Action.Flight Crew: Took Evasive Action  
Resolutory Action.Controller: Issued New Clearance  
Resolutory Action.None Taken: Unable

**Supplementary**  
Problem Areas: ATC Human Performance  
Problem Areas: Flight Crew Human Performance
Narrative:
WAKE TURB UPSET BEHIND A B757. WE WERE LEVEL AT FL350 DOING .75 MACH, ABOUT 220 NM S OF DIW NEAR AR7. WE WERE FLYING A HEADING OF 005 DEGS AND A TRACK OF 018 DEGS. THE WINDS WERE 274 DEGS/65 KTS. WE WERE FILED FOR FL370 BUT WE HAD TFC AT 11 O'CLOCK POS AND 3 NM AT FL370. ZJX (135.07) CALLED AND SAID IF WE SLOWED AND GOT 8 NM BEHIND THE TFC THEY WOULD LET US UP TO FL370. WE SLOWED TO .70 MACH AND WHEN WE WERE 8 NM BEHIND THE TFC, CTR GAVE US FL370. WE WERE CLBING AT .70 MACH AND AROUND 500 FPM. WHEN WE WENT THROUGH FL365 I FELT A SLIGHT NIBBLE FOLLOWED BY A SEVERE ROLL TO THE R. IT TOOK FULL L AILERON AND SOME TIME TO RECOVER FROM THE ROLL. WHEN THINGS FINALLY SETTLED DOWN AND WE WERE BACK TO WINGS LEVEL OUR ALT WAS FL373. CTR CALLED AND SAID WE WERE ONLY CLRED TO FL370. WE RESPONDED 'WE WERE RECOVERING FROM A WAKE TURB UPSET.' WE WERE HANDED OFF TO ZJX (120.12). WE ASKED THE NEW CTLR WHAT WE WERE FOLLOWING AND WHAT HIS SPD WAS. ZJX SAID A B757 DOING .80 MACH. WE ASKED IF WE COULD SLOW DOWN TO 10 NM IN TRAIL. CTR ASKED IF WE WANTED TO TURN L OR R. WE SAID L AND TURNED L 15 DEGS MAINTAINING .70 MACH. WHEN WE WERE 12 MI BEHIND AND SLIGHTLY L OF THE PATH OF THE B757, CTR CLRED US BACK DIRECT DIW.

Synopsis:
BAE125 CLBING TO FL370 ENCOUNTER A SEVERE ROLL CAUSED BY WAKE TURB FROM A B757 8 MI AHEAD AT FL370.
ACN: 543165

Time
Date : 200203
Day : Sat
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : DTW.Airport
State Reference : MI
Altitude.AGL.Single Value : 750

Environment
Flight Conditions : VMC
Ceiling.Single Value : 3000

Aircraft / 1
Controlling Facilities.Tower : DTW.Tower
Operator.Common Carrier : Air Carrier
Make Model : A320
Mission : Passenger
Navigation In Use.Other : FMS or FMC
Flight Phase.Descent : Approach
Route In Use.Arrival : On Vectors

Aircraft / 2
Controlling Facilities.Tower : DTW.Tower
Operator.Common Carrier : Air Carrier
Make Model : Commercial Fixed Wing
Mission : Passenger
Flight Phase.Descent : Approach

Component / 1
Aircraft Component : Flap/Slat Control System
Aircraft Reference : X

Component / 2
Aircraft Component : Indicating and Warning - Flight & Navigation Systems
Aircraft Reference : X

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 18300
Experience.Flight Time.Last 90 Days : 100
ASRS Report : 543165

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 4
Function.Controller : Approach

Person / 5
Function.Controller : Local

Events
Anomaly.Inflight Encounter : Wake Turbulence
Anomaly.Non Adherence : Company Policies
Anomaly: Non Adherence : Published Procedure
Independent Detector: Aircraft Equipment : GPWS

Factors
Maintenance: Performance Deficiency : Fault Isolation

Supplementary
Problem Areas : Aircraft
Problem Areas : Airspace Structure
Problem Areas : Environmental Factor
Narrative:
GPWS ACTIVATED AT 750 FT FOR LNDG GEAR NOT DOWN. WE IMMEDIATELY LOWERED THE GEAR AND MADE AN UNEVENTFUL LNDG. SEVERAL FACTORS CONTRIBUTED TO OUR FAILURE TO GET THE GEAR DOWN. FIRST, THE COPLT HAD HAND FLOWN THE PATTERN (LOTS OF VECTORING) FROM ABOUT 8000 FT (AUTOPTHROTTLES ENGAGED), INCREASING MY WORKLOAD CONSIDERABLY. SECOND, WE WERE BEING VECTORED BEHIND A HVY JET AND HIT MODERATE WAKE TURB AT ABOUT 4000 FT, REQUIRING A PA TO THE PAX. WE WERE ALSO SLOWED TO 150 KTS VERY EARLY IN THE PATTERN, AND THE COPLT CALLED FOR FLAPS 3 DEGS, OUR NORMAL POINT TO ALSO LOWER THE GEAR, BUT DID NOT CALL FOR THE GEAR AS WE WERE TOO FAR OUT. WE WERE ALSO SWITCHED TO THE TWR AND CLRED TO LAND AT ABOUT 12 MI OUT -- A VERY LONG, SLOW FINAL AND OUT OF NORMAL SEQUENCE (RELAX AT LAST). AT ABOUT 1500 FT, THE COPLT CALLED FLAPS FULL, LNDG CHK. (I HAVE 16 YRS IN A DC9 WHERE YOU GET A WARNING FLAPS FULL.) AS I STARTED THE CHKLIST, I WAS DISTR BY SOME VERY LIGHT TURB (THE HVY WAS STILL IN THE BACK OF MY MIND) AND I MISSED OR WAS NOT CONCENTRATING ON THE FIRST AND MOST IMPORTANT ITEM IN THE CHKLIST 'GEAR DOWN AND GREEN.' COMPLACENCY WAS A MAJOR FACTOR IN THAT WE WERE BOTH TOO COMFORTABLE AT THIS POINT IN THE APCH WITH ALL THE 'DIFFICULT' STUFF BEHIND US. SOMETHING WAS NAGGING AT ME BUT I WAS THINKING IT WAS PROBABLY THE WAKE TURB. I ALWAYS RECHK LIGHTS, GEAR, FLAPS AND SPOILERS BEFORE LNDG, BUT THAT IS NO SUBSTITUTE FOR GOOD CHKLIST DISCIPLINE. BEING ALERT IS EASY DURING THE DIFFICULT PHASES OF FLT, BUT WE REAFFIRMED HOW IMPORTANT IT IS TO STAY ALERT DURING THE ENTIRE FLT.

Synopsis:
A GEAR UP APCH BY AN A320 FLC WHO RECEIVE A GPWS GEAR UP WARNING ON SHORT FINAL AT 750 FT AGL ON FINAL TO RWY 21L AT DTW, MI.
Time
Date: 200204
Day: Thu
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: PDX.Airport
State Reference: OR
Altitude.AGL.Bound Lower: 8000
Altitude.AGL.Bound Upper: 13000

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities.TRACON: P80.TRACON
Operator.Common Carrier: Air Carrier
Make Model: A320
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach

Aircraft / 2
Controlling Facilities.TRACON: P80.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Type: 313
ASRS Report: 543499

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Approach

Events
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Inflight Encounter: Weather
Anomaly.Other Anomaly: Loss Of Aircraft Control
Anomaly.Other Anomaly: Unstabilized Approach
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Flight Crew: Regained Aircraft Control
Resolutory Action.Controller: Issued New Clearance
Resolutory Action.Controller: Provided Flight Assist
Resolutory Action.None Taken: Anomaly Accepted
Consequence.Other: Maintenance Action
Supplementary
Problem Areas: Aircraft
Problem Areas: Environmental Factor
Problem Areas: Weather

Narrative:
ON BONVL 4 ARR, WHILE FOLLOWING DSCNT PROFILE, A B757 INTERCEPTED PROFILE ABOUT 8 NM AHEAD. CONTINUING DOWN THE PROFILE, OUR ACFT EXPERIENCED 3 CASES OF WAKE TURB AT LEAST MODERATE IN NATURE, AND WITH MOMENTARY LOSSES OF CTL ON 2 OCCASIONS. WE WERE FLYING 250 KTS, ON THE PROFILE, SPD BREAK EXTENDED ON FIRST OCCASION, NONE AFTER. WE EXPERIENCED THE TURB AT ABOUT 13000 FT THE FIRST TIME, AND AROUND 8000 FT. THE FINAL INCIDENT. WE CONTINUED WELL ABOVE THE PROFILE AND VECTORED LATERALLY AWAY FROM THE B757. THIS WAS COORD WITH ATC. THE LNDG WAS UNEVENTFUL. IN 2 OF 3 OCCASIONS, ROLL WAS MOMENTARILY UNCTLABLE, AND THE ACFT WENT TO AROUND 30 UNTIL CTL WAS RESTORED, WINDS WERE 280 DEGS AT 15-20 KTS, A DIRECT HEADWIND, CLR SKIES. THE OTHER ACFT WAS ACR Y. I DISCUSSED THIS WITH CREW MEMBERS ABOARD ACR Y. THEY WERE ON PROFILE, 250 KTS, FULL SPD BRAKES EXTENDED AT 180000 LB WT. THEY MAINTAINED SPD TO A 6 MI FINAL AND HAD BRAKES EXTENDED TO 4 MI. THEY ALSO NOTED IT UNUSUAL THAT A WAKE TURB ENCOUNTER WOULD OCCUR AT 8 NM SEPARATION AT THAT SEVERITY. CREW COORD THROUGHOUT WAS EXCELLENT, AS WAS THE COOPERATION OF OTHER CREW. THE NECESSITY OF THIS RPT WAS DICTATED BY THE SEVERITY OF THE ENCOUNTER AND THE LARGE SEPARATION OF ACFT, WHICH MADE IT AN UNUSUAL OCCURRENCE.

Synopsis:
A320 CREW ENCOUNTERED MODERATE TO SEVERE WAKE TURB FROM A B757 8 MI AHEAD IN PDX CLASS E AIRSPACE.
ACN: 543696

Time
Date: 200204
Day: Sun
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: ORD.Airport
State Reference: IL
Altitude.MSL.Single Value: 5000

Environment
Flight Conditions: IMC

Aircraft / 1
Controlling Facilities.TRACON: C90.TRACON
Operator.Common Carrier: Air Carrier
Make Model: MD-80 Series (DC-9-80) Undifferentiated or Other Model
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Approach: Instrument Precision

Aircraft / 2
Controlling Facilities.TRACON: C90.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B757-200
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Approach: Instrument Precision

Aircraft / 3
Controlling Facilities.TRACON: C90.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B757-200
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Approach: Instrument Precision

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
ASRS Report: 543696

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 6
Function.Oversight: Supervisor
Function.Controller: Supervisor

Person / 5
Function.Controller : Approach

Events
Anomaly.Inflight Encounter : Wake Turbulence
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.None Taken : Detected After The Fact
Consequence.FAA : Reviewed Incident With Flight Crew
Consequence.Other : Company Review

Supplementary
Problem Areas : FAA
Problem Areas : Weather
Narrative:
WAKE TURB ENCOUNTER. LOCATION: PRIOR TO GS ON RWY 22R ILS APCH. WE WERE IMC ON ILS FINAL TO RWY 22R AT ORD AT 5000 FT AND CLRED FOR THE APCH. WE HAD BEEN SLOWED DOWN TO 160 KTS AND ADVISED TO USE CAUTION FOR WAKE TURB AS WE WERE FOLLOWING A B757. SPACING WAS APPROX 4.5 MI ON OUR TCASII SCOPE. THE B757 AHEAD OF US WAS FLYING 500 FT HIGH ACCORDING TO OUR TCASII ALT INDICATION. THE FO AND I COMMENTED THAT WE WERE GOING TO HIT HIS WAKE, AND THAT WE WOULD BE READY FOR IT. I BELIEVE THAT THE B757 WAS FOLLOWING ANOTHER B757 AND WAS PROBABLY FLYING HIGH TO AVOID ITS WAKE. WHEN WE HIT THE WAKE, IT EXCEEDED THE ABILITY OF OUR AUTOPLT TO CTL THE ACFT. THE AUTOPLT DISCONNECTED AND I HAND FLEW AS THE ACFT ROLLED APPROX 25 DEGS L AND R -- CERTAINLY ENOUGH TO CONCERN OUR PAX. I INFORMED APCH CTL THAT WE WERE GOING TO CLB 200 FT AND TOLD HIM WHY. HE SAID OK, BUT COMMENTED THAT THE SPACING WAS GOOD. I RESPONDED THAT I WAS NOT COMPLAINING ABOUT THE SPACING BUT THAT WE WERE BEING ‘BEAT UP’ BY THE WAKE. I WAS PREPARED TO FLY 1/2 DOT HIGH ON THE GS IF NECESSARY TO AVOID HIS WAKE, BUT ONCE ON THE GS, THE WAKE WAS NOT A PROB. UPON LNDG, I CALLED THE APCH FACILITY ON THE HOTLINE IN ORD TO EXPLAIN WHAT HAD HAPPENED. THE PERSON I SPOKE TO SAID HE WOULD PASS IT TO THE CTLR. THE PURPOSE OF THIS RPT IS NOT TO CRITICIZE THE CTLR, BUT TO POINT OUT THE AFFECT OF A B757 ON AN MD80 IN THAT SIT.

Synopsis:
MD80 CREW ENCOUNTERED WAKE TURB BEHIND A B757-200 WHICH ALMOST EXCEEDED THE CTL CAPABILITY OF THE ACFT.
ACN: 544869

Time
Date: 200204
Day: Thu
Local Time Of Day: 0601 To 1200

Place
Locale Reference: Airport: MDW.Airport
State Reference: IL
Altitude.MSL.Bound Lower: 3300
Altitude.MSL.Bound Upper: 3600

Environment
Flight Conditions: VMC

Aircraft / 1
Controlling Facilities: TRACON: C90.TRACON
Operator: General Aviation: Corporate
Make Model: Learjet 35
Mission: Business
Flight Phase: Descent: Intermediate Altitude
Route In Use: Approach: Circling

Aircraft / 2
Controlling Facilities: TRACON: C90.TRACON
Operator: Common Carrier: Air Carrier
Make Model: B757-200
Mission: Passenger
Route In Use: Approach: Circling

Person / 1
Function: Oversight: PIC
Function: Flight Crew: Captain
Experience: Flight Time: Total: 14000
Experience: Flight Time: Last 90 Days: 70
Experience: Flight Time: Type: 7000
ASRS Report: 544869

Person / 2
Function: Flight Crew: First Officer

Person / 3
Function: Oversight: PIC
Function: Flight Crew: Captain

Person / 4
Function: Controller: Approach

Events
Anomaly: Altitude Deviation: Excursion From Assigned Altitude
Anomaly: Inflight Encounter: Wake Turbulence
Anomaly: Non Adherence: Clearance
Anomaly: Non Adherence: Required Legal Separation
Anomaly: Other Anomaly: Loss Of Aircraft Control
Independent Detector: Other: Flight Crew A: 1
Resolutory Action: Flight Crew: Exited Adverse Environment
Resolutory Action: Flight Crew: Regained Aircraft Control
Resolutory Action: Flight Crew: Took Evasive Action
Resolutory Action: Controller: Issued Advisory
Consequence: FAA: Reviewed Incident With Flight Crew
Supplementary

Problem Areas: Aircraft
Problem Areas: Airspace Structure
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas: Flight Crew Human Performance
Narrative:
ON APCH TO RWY 31C WITH A CIRCLE TO RWY 22L, BEHIND A HVY B757, ENCOUNTERED TURB AT 3300 FT. I WAS CLRED FROM 4000 FT TO 3000 FT. WHEN I ENCOUNTERED THE TURB I CLBED TO 3600 FT TO AVOID THE WAKE TURB FROM THE B757. APCH TOLD ME I COULD NOT CLB. I ADVISED APCH I WAS TRYING TO AVOID WAKE TURB. THEY TOLD ME THE BOEING WAS NOT A FACTOR. HOWEVER, THEY WERE NOT SITTING IN MY SEAT. NO OTHER TFC WAS INVOLVED. I FELT I WAS PROTECTED BTWN 4000 FT AND 3000 FT.

Synopsis:
WAKE TURB ENCOUNTER CREATED BY A B757 FORCES AN LR35 PIC TO CLB BACK TOWARDS HIS LAST ASSIGNED ALT 6 NM FROM MDW, IL.
ACN: 545207

Time
Date: 200204
Day: Mon
Local Time Of Day: 0601 To 1200

Place
Locale Reference. Airport: ORD. Airport
State Reference: IL
Altitude. AGL. Single Value: 0

Aircraft / 1
Controlling Facilities. Tower: ORD. Tower
Operator. Common Carrier: Air Carrier
Make Model: A320
Flight Phase. Ground: Takeoff Roll

Aircraft / 2
Controlling Facilities. Tower: ORD. Tower
Make Model: B757 Undifferentiated or Other Model
Flight Phase. Landing: Roll

Person / 1
Function. Flight Crew: Captain
ASRS Report: 545207

Person / 2
Function. Oversight: PIC
Function. Flight Crew: Captain

Person / 3
Function. Oversight: PIC
Function. Flight Crew: Captain

Person / 4
Function. Controller: Local

Events
Anomaly. Inflight Encounter: Wake Turbulence
Anomaly. Non Adherence: Published Procedure

Supplementary
Problem Areas: ATC Human Performance
Narrative:
I continue to see ACFT being given TKOF CLRNC on RWY 32L T-10 with no regard for type of ACFT LNDG on RWY 09L. The 09L APCH path crosses the DEPARTURE path of the 32L departures. The other morning an A-320 type with clred for TKOF on RWY 32L, as soon as a B757 clred the TKOF path LNDG on 09L. It is my understanding that we need 4 MILES or 2 MINS behind a B757, even if it crosses the DEPARTURE path. During the daytime it is easy to CHK ACFT TYPE, but at night time, it is hard to see type of ACFT on final for 09L when holding into POS RWY 32L Awaiting TKOF CLRNC.

Synopsis:
OBSERVING RPTR CONCERNED THAT WAKE TURB SEPARATION IS NOT BEING APPLIED BTWN A B757 LNDG ON RWY 09L AND AN A-320 DEPARTING OFF RWY 32L.
ACN: 546823

Time
Date: 200205
Day: Tue
Local Time Of Day: 1201 To 1800

Place
Locale Reference.Airport: DET.Airport
State Reference: MI
Altitude.MSL.Single Value: 3000

Environment
Flight Conditions: IMC
Ceiling.Single Value: 900

Aircraft / 1
Controlling Facilities.TRACON: D21.TRACON
Operator.General Aviation: Personal
Mission: Pleasure
Flight Phase.Climbout: Initial

Aircraft / 2
Controlling Facilities.TRACON: D21.TRACON
Operator.General Aviation: Corporate
Make Model: Cessna Citation Undifferentiated or Other Model
Mission: Passenger
Flight Phase.Climbout: Takeoff

Aircraft / 3
Controlling Facilities.Tower: DET.Tower
Operator.General Aviation: Corporate
Make Model: Hawker Horizon (Ray)
Mission: Passenger
Flight Phase.Climbout: Takeoff

Person / 1
Function.Flight Crew: Single Pilot
Experience.Flight Time.Total: 1297.3
Experience.Flight Time.Type: 1094.8
ASRS Report: 546823

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Departure

Events
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Inflight Encounter: Weather
Anomaly.Other Anomaly: Loss Of Aircraft Control
Independent Detector.Other.ControllerA: 4
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Controller: Issued New Clearance
Resolutory Action.Controller: Provided Flight Assist
Resolutory Action: None Taken: Detected After The Fact

**Supplementary**
Problem Areas: Flight Crew Human Performance
Problem Areas: Weather

**Narrative:**
The ceiling was 900 ft with OVCST at 1200 ft. As we entered the clouds, the plane was suddenly all over the sky with Detroit Dep trying to vector me and me being unable to fly the proper HDGs. My assigned Alt was 3000 ft and then I was clrred to 4000 ft but I was unable to fly it. The gyro, attitude indicator and compass were all swinging wildly with the vert SPD indicator going from 2000 FPM down to 2000 FPM up. Detroit Dep then advised me to stay at 3000 ft. At that point I was able to follow the vectors and maintain Alt. It did not last very long and I was able to fly toward Sarnia (ZR) on the proper HDG. I believe that the 2 jets taking off from PTK prior to my taking off were my prob in that I was in the wake turb of a Cessna Citation which took off immediately before me or the Hawker Siddley which had taken off just before the Cessna. After much thought about the sit, I believe that if I had waited more time after the tkof of the Cessna, I would have been much better off. Fortunately my practice with unusual attitudes helped get the plane under CTL. Also, if the TWR had reminded me about wake turb, I would have been more aware of it.

**Synopsis:**
AC11 PLT LOST ACFT CTL AFTER ENTERING IMC. WAKE TURB FROM BIZJET TFC AHEAD MAY HAVE CONTRIBUTED.
ACN: 547918

Time
Date: 200205
Day: Sat
Local Time Of Day: 1201 To 1800

Place
State Reference: GA
Altitude. MSL. Single Value: 20000

Environment
Flight Conditions: VMC
Ceiling. Single Value: 22000

Aircraft / 1
Controlling Facilities. ARTCC: ZTL.ARTCC
Operator. Common Carrier: Air Carrier
Make Model: MD-88
Mission: Passenger
Navigation In Use. Other: FMS or FMC
Flight Phase. Descent: Intermediate Altitude

Aircraft / 2
Controlling Facilities. ARTCC: ZTL.ARTCC
Operator. Common Carrier: Air Carrier
Make Model: B777 Undifferentiated or Other Model
Flight Phase. Cruise: Level
Flight Phase. Descent: Intermediate Altitude

Person / 1
Function. Oversight: PIC
Function. Flight Crew: Captain
Experience. Flight Time. Total: 4000
Experience. Flight Time. Last 90 Days: 200
Experience. Flight Time. Type: 2400
ASRS Report: 547918

Person / 2
Function. Flight Crew: First Officer

Person / 3
Function. Oversight: PIC
Function. Flight Crew: Captain

Person / 4
Function. Controller: Radar

Events
Anomaly. Inflight Encounter: Wake Turbulence
Anomaly. Other Anomaly: Loss Of Aircraft Control
Independent Detector. Other. Flight CrewA: 1
Resolutory Action. Flight Crew: Exited Adverse Environment
Resolutory Action. Flight Crew: Regained Aircraft Control
Resolutory Action. Flight Crew: Took Precautionary Avoidance Action
Resolutory Action. Controller: Issued New Clearance

Supplementary
Problem Areas: Environmental Factor
Narrative:
20 MI IN TRAIL OF B777 ON MACEY ARR AT FL200, GOT UNCOMMENDED ROLL 45-90 DEGS BOTH R, THEN L WITH MODERATE TURB. AGAIN AT APPROX FL180 GOT ROLL OF 35-45 DEGS IN BOTH DIRECTIONS. ATC INFORMED US OF B777 20 MI AHEAD. WIND WAS R XWIND AT 35 KTS. OFFSET UPWIND REST OF ARR WITH NO FURTHER INCIDENT. CALLBACK CONVERSATION WITH RPR REVEALED THE FOLLOWING INFO: THE AUTOPLT WAS IN USE BUT DISCONNECTED AUTOMATICALLY WITH THE TURB ENCOUNTER. DURING THE HAND FLOWN RECOVERY NEAR FULL CTL INPUTS WERE USED. BOTH ACFT INVOLVED WERE ON THE MACEY 2 ARR WITH A XING RESTR OF 13000 FT AT WOMAC INTXN. THERE WAS NO OTHER RPTED TURB RPTED IN THE AREA.

Synopsis:
AN MD88 FOLLOWING 20 MI BEHIND A B777 ENCOUNTERS WAKE TURB RESULTING IN TURB AND A ROLL OF UP TO 90 DEGS BEFORE RECOVERY IS ACCOMPLISHED.
ACN: 548184

Time
Date: 200204
Day: Sat
Local Time Of Day: 0601 To 1200

Place
Locale Reference.Airport: SEA.Airport
State Reference: WA
Altitude.MSL.Single Value: 3000

Environment
Flight Conditions: IMC

Aircraft / 1
Controlling Facilities.TRACON: S46.TRACON
Operator.Common Carrier: Air Carrier
Make Model: DHC-8-300
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach
Route In Use.Approach: Instrument Precision

Aircraft / 2
Controlling Facilities.Tower: SEA.Tower
Operator.Common Carrier: Air Carrier
Make Model: B777 Undifferentiated or Other Model
Mission: Passenger

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 4207
Experience.Flight Time.Last 90 Days: 78
Experience.Flight Time.Type: 2178
ASRS Report: 548184

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Approach

Person / 5
Function.Controller: Local

Events
Anomaly.Inflight Encounter: Wake Turbulence
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Flight Crew: Exited Adverse Environment
Resolutory Action.Flight Crew: Regained Aircraft Control
Resolutory Action.Controller: Issued Advisory
Resolutory Action.None Taken: Unable

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Environmental Factor
Problem Areas : Flight Crew Human Performance

Narrative :
ON LOCALIZER, LEVEL AT 3000 FT MSL, 7NM BEHIND B777 THAT WAS DESCENDING OVER AND IN FRONT OF MY AIRPLANE. ENCOUNTERED WAKE TURB, AIRPLANE ROLLED 60 DEGS TO THE RIGHT BEFORE I WAS ABLE TO STOP THE ROLL. STOPPED ROLL ONLY AFTER ADDED POWER, FULL OPPOSITE AILERON HAD NO EFFECT UNTIL ADDED POWER. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATED THEY WERE IN SOLID IMC CONDITIONS WHEN THE ACFT ROLLED APPROX 60 DEGS. HE SAID HE APPLIED POWER AND CAME VERY CLOSE TO MAKING A COMPLETE ROLL BUT THE ADDED POWER BROUGHT THE ACFT BACK UNDER CTL. HE STATED THEY WERE EXTENDED ON DOWNWIND TO ABOUT 16 MILES THEN TURNED ONTO FINAL. THE CTLR ADVISED HE WAS VECTORING A B777 ON TO FINAL 7 MILES IN FRONT OF THEM AND TO CAUTION WAKE TURB. IN TALKING TO THE TWR SUPVR AFTER LNDG, HE WAS TOLD THERE IS NO VERTICAL CRITERIA FOR WAKE TURB IF THE NO LESS THAN SPECIFIED MINIMUM DISTANCE IS MET.

Synopsis :
A DHC-8 COMMUTER ENCOUNTERS SEVERE WAKE TURB FROM A B777 THAT WAS BEING VECTORED ONTO FINAL AHEAD OF THE FLT.
ACN: 548255

Time
Date: 200205
Day: Fri
Local Time Of Day: 1801 To 2400

Place
Locale Reference.Airport: CVG.Airport
State Reference: KY
Altitude.MSL.Single Value: 4000

Environment
Flight Conditions: VMC
Ceiling.Single Value: 4100

Aircraft / 1
Controlling Facilities.TRACON: CVG.TRACON
Operator.Common Carrier: Air Carrier
Make Model: Regional Jet CL65, Bombardier (Canadair)
Mission: Passenger
Flight Phase.Descent: Approach
Route In Use.Arrival: On Vectors

Aircraft / 2
Controlling Facilities.TRACON: CVG.TRACON
Operator.Common Carrier: Air Carrier
Make Model: B757 Undifferentiated or Other Model
Navigation In Use.Other: FMS or FMC
Flight Phase.Descent: Approach

Aircraft / 3
Controlling Facilities.TRACON: CVG.TRACON
Operator.Common Carrier: Air Carrier
Make Model: Commercial Fixed Wing
Flight Phase.Descent: Approach
Route In Use.Arrival: On Vectors

Person / 1
Function.Controller: Approach
ASRS Report: 548255

Person / 2
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Oversight: PIC
Function.Flight Crew: Captain

Events
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Non Adherence: Published Procedure
Anomaly.Non Adherence: Required Legal Separation
Independent Detector.Other.ControllerA: 1
Independent Detector.Other.Flight CrewA: 2
Resolutory Action.Flight Crew: Took Precautionary Avoidance Action
Resolutory Action.Controller: Issued New Clearance
Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Flight Crew Human Performance

Narrative:
ACFT X ISSUED A CAUTIONARY WAKE TURB ADVISORY FOR FOLLOWING A B757 WHILE ON DOWNWIND LEG. PARALLEL APCHS IN USE. ACFT X WAS GIVEN A VECTOR AND APCH CLRNC TO RWY 36L TO JOIN FINAL 7 1/2 - 8 MI, BEHIND B757, AT 3000 FT MSL. ACFT X -- NO REPLY. CLRNC WAS REISSUED -- NO REPLY. CLRNC ISSUED A THIRD TIME AND PLT ADVISED (AS PLT WAS GOING THROUGH THE LOC AND TFC BEING VECTORED TO RWY 36R), HE COULD 'NOT ACCEPT ALT FOR CLRNC.' HE WAS VECTORED AWAY FROM OTHER TFC AND QUESTIONED ABOUT HIS LATE NON ACCEPTANCE, SAID HE WOULD NOT TAKE AN ALT BELOW THE HVY. THE FACT IS HE WAS TOLD HE WAS FOLLOWING A B757 NOT A HVY. THEY WERE BOTH CLRED TO JOIN AT 3000 FT MSL. HE HAD MORE THAN REQUIRED SEPARATION.

Synopsis:
CRJ PLT REFUSES 8 MI SEPARATION BEHIND A B757.
**Time**
Date: 200206
Day: Wed
Local Time Of Day: 1801 To 2400

**Place**
Locale Reference. Airport: ORD.Airport
State Reference: IL
Altitude.AGL.Single Value: 250

**Environment**
Ceiling.Single Value: 700

**Aircraft / 1**
Controlling Facilities. Tower: ORD.Tower
Operator. Common Carrier: Air Carrier
Make Model: Fokker 100
Mission: Passenger
Navigation In Use. Other: FMS or FMC
Flight Phase. Descent: Approach
Flight Phase. Landing: Go Around
Route In Use. Approach: Instrument Precision

**Aircraft / 2**
Controlling Facilities. Tower: ORD.Tower
Operator. Common Carrier: Air Carrier
Make Model: B777 Undifferentiated or Other Model
Mission: Passenger
Flight Phase. Descent: Approach
Flight Phase. Landing: Roll

**Person / 1**
Function. Oversight: PIC
Function. Flight Crew: Captain
ASRS Report: 550539

**Person / 2**
Function. Flight Crew: First Officer

**Person / 3**
Function. Oversight: PIC
Function. Flight Crew: Captain

**Person / 4**
Function. Controller: Local

**Events**
Anomaly. Inflight Encounter: Wake Turbulence
Anomaly. Other Anomaly: Unstabilized Approach
Independent Detector. Other. Flight Crew A: 1
Independent Detector. Other. Flight Crew B: 2
Resolutory Action. Flight Crew: Executed Go Around
Consequence. Other: Company Review

**Supplementary**
Problem Areas: Aircraft
Problem Areas: Environmental Factor
Narrative:
APCH TO ORD RWY 9L FOLLOWING B777 5 MI IN TRAIL. WX 700 FT BROKEN, 3 MI VISIBILITY OR GREATER. FLEW APCH SLIGHTLY HIGH TO AVOID WAKE TURB. NO PROBS UNTIL IN CLOSE. SETTLED TO THE GS AT ABOUT 500 FT AGL. B777 DELAYED TURNING OFF THE RWY. AT 250 FT AGL WITH B777 JUST TURNING OFF, OUR ACFT ON SPD AND ON GS WITH FLAPS 42 DEGS WE HAD A SUDDEN L WING DROP OF 20-25 DEGS AND A 20 KT LOSS OF AIRSPD WITH SOME L YAW GAR INITIATED AND RECOVERY WAS UNEVENTFUL. NORMAL LNDG ON RWY 4 FOLLOWED. WE WERE VERY COMFORTABLE ON THE APCH AND SPACING DID NOT SEEM TO BE A PROB. WINDS AT THE FIELD WERE VARIABLE AT THE TIME BELOW 10 KTS. WE WERE VERY SURPRISED TO ENCOUNTER THE WAKE TURB WHEN WE DID.

Synopsis:
AN 4100 CREW, ON SHORT FINAL AT ORD, EXECUTED A GAR WHEN ENCOUNTERING WAKE TURB FROM THE PROCEEDING ACFT.
ACN: 553765

Time
Date: 200207
Day: Sun
Local Time Of Day: 1201 To 1800

Place
Locale Reference: Airport: LAX.Airport
State Reference: CA
Altitude.AGL.Single Value: 0

Aircraft / 1
Controlling Facilities: Tower: LAX.Tower
Operator: Common Carrier: Air Carrier
Make Model: B767-300
Mission: Passenger
Flight Phase: Ground: Position And Hold

Aircraft / 2
Controlling Facilities: Tower: LAX.Tower
Operator: Common Carrier: Air Carrier
Make Model: B747 Undifferentiated or Other Model
Flight Phase: Ground: Takeoff Roll
Flight Phase: Climbout: Takeoff

Person / 1
Function: Oversight: PIC
Function: Flight Crew: Captain
Experience: Flight Time: Total: 15000
Experience: Flight Time: Last 90 Days: 125
Experience: Flight Time: Type: 4200
ASRS Report: 553765

Person / 2
Function: Flight Crew: First Officer

Person / 3
Function: Oversight: PIC
Function: Flight Crew: Captain

Person / 4
Function: Controller: Local

Events
Anomaly: Inflight Encounter: Wake Turbulence
Anomaly: Non Adherence: Published Procedure
Anomaly: Non Adherence: Required Legal Separation
Independent Detector: Other.ControllerA: 4
Independent Detector: Other.Flight CrewA: 1
Independent Detector: Other.Flight CrewB: 2
Resolutory Action: Controller: Issued New Clearance
Consequence: FAA: Reviewed Incident With Flight Crew

Supplementary
Problem Areas: ATC Human Performance
Problem Areas: Flight Crew Human Performance
Narrative:
IN A LONG LINE-UP FOR TKOF RWY 24L, WE WERE POSITIONED BEHIND A B747. THE B747 WAS CLRED FOR TKOF AND WE WERE ASKED TO TAXI INTO POS AND HOLD. WIND CONDITIONS: 250 DEGS AT 10 KTS. THIS CAUSES CONCERN FOR WAKE TURB PURPOSES. WE TAXIED INTO POS AND HELD ON THE RWY. FOR SAFETY REASONS, I TIMED THE B747’S ROTATION UNTIL WE RECEIVED OUR TKOF CLRNC -- IT WAS 35 SECONDS! I TOLD MY FO TO REFUSE THE TKOF CLRNC. LAX TWR CAME BACK AND ASKED, ‘WHY DID WE CANCEL THE CLRNC?’ WE EXPLAINED ‘INSUFFICIENT WAKE TURB SEPARATION!’ THE TWR SNAPPED BACK AND SAID ‘NEXT TIME YOU SHOULD ASK FOR MORE TIME AND THEN REPLIED THAT THEY (LAX TWR) GAVE ADEQUATE SEPARATION BY DISTANCE CRITERIA!’ WE HELD ON THE RWY ANOTHER 3 MINS AND THE TWR ASKED US IF WE WERE READY FOR TKOF. WE SAID YES, AND DEPARTED UNEVENTFULLY ENCOUNTERING NO WAKE TURB FROM THE B747 AND ARRIVED SAFELY IN SLC.

Synopsis:
LAX LCL CTLR QUESTIONS B767 IS REASON FOR NOT DEPARTING WHEN CLRED AFTER A B747 HAD JUST TAKEN OFF.
Wake Turbulence

**ACN: 554022**

### Time
- **Date:** 200207
- **Day:** Wed
- **Local Time Of Day:** 0601 To 1200

### Place
- **State Reference:** IL
- **Altitude (MSL): Single Value:** 4000

### Environment
- **Flight Conditions:** VMC
- **Ceiling:** CLR

### Aircraft / 1
- **Controlling Facilities:** TRACON : C90.TRACON
- **Operator:** Common Carrier : Air Carrier
- **Make Model:** B737-300
- **Mission:** Passenger
- **Flight Phase:** Descent : Approach

### Aircraft / 2
- **Controlling Facilities:** TRACON : C90.TRACON
- **Operator:** Common Carrier : Air Carrier
- **Make Model:** B757 Undifferentiated or Other Model
- **Flight Phase:** Descent : Approach

### Person / 1
- **Function:** Oversight : PIC
- **Function:** Flight Crew : Captain
- **Experience:** Flight Time.Total : 16000
- **Experience:** Flight Time.Last 90 Days : 200
- **Experience:** Flight Time.Type : 4245
- **ASRS Report:** 554022

### Person / 2
- **Function:** Flight Crew : First Officer
- **Experience:** Flight Time.Last 90 Days : 173
- **ASRS Report:** 554021

### Person / 3
- **Function:** Oversight : PIC
- **Function:** Flight Crew : Captain

### Person / 5
- **Function:** Controller : Approach

### Events
- **Anomaly:** Altitude Deviation : Excursion From Assigned Altitude
- **Anomaly:** Inflight Encounter : Turbulence
- **Anomaly:** Inflight Encounter : Wake Turbulence
- **Independent Detector:** Other.Flight CrewA : 1
- **Independent Detector:** Other.Flight CrewB : 2
- **Resolutory Action:** Flight Crew : Took Precautionary Avoidance Action
- **Resolutory Action:** Controller : Issued New Clearance
- **Consequence:** Other : Company Review
- **Consequence:** Other : Physical Injury

### Supplementary
- **Problem Areas:** Environmental Factor
Narrative:
ON APCH TO RWY 27L, FOLLOWING A B757, 5 1/2 MI AHEAD, ENCOUNTERED MODERATE WAKE TURB. ACFT ROLLED IN EXCESS OF 30 DEGS, FO WAS PF. DISCONNECTED AUTOPLT, CLBED ABOUT 200 FT TO SMOOTH AIR. CONTINUED APCH UNEVENTFULLY. UPON ARR, FOUND OUT 1 FLT ATTENDANT HAD INJURED HER HAND IN THE ENCOUNTER. NO OTHER INJURIES RPTED. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THAT HE HAD NOTICED CALLS FROM PRECEDING ACFT ON THE APCH QUESTIONING THE TYPE ACFT THEY WERE FOLLOWING, WHICH KEYED HIM INTO THE FACT THAT THE CONDITIONS WERE SUCH THAT WAKES WERE NOT DISSIPATING. IT WAS A VERY SMOOTH FLT CONDITION OTHERWISE WITH ALMOST NO WIND. ATC WAS NOTIFIED AND SPD WAS REDUCED TO INCREASE SEPARATION. THE FLT ATTENDANT INJURY WAS MINOR.

Synopsis:
A B737 ENCOUNTERS WAKE TURB AT 4000 FT WHEN FOLLOWING 5 PT 5 MI BEHIND A B757 ON APCH.
ACN: 554112

Time
Date: 200207
Day: Sat
Local Time Of Day: 1201 To 1800

Place
Locale Reference: Airport: EWR.Airport
State Reference: NJ
Altitude.AGL.Single Value: 0

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft / 1
Controlling Facilities.Tower: EWR.Tower
Operator.Common Carrier: Air Carrier
Make Model: B757-300
Mission: Passenger
Navigation In Use.Other: FMS or FMC
Flight Phase.Ground: Takeoff Roll

Aircraft / 2
Controlling Facilities.Tower: EWR.Tower
Operator.Common Carrier: Air Carrier
Make Model: Commercial Fixed Wing
Flight Phase.Landing: Roll

Person / 1
Function.Oversight: PIC
Function.Flight Crew: Captain
Experience.Flight Time.Total: 15000
Experience.Flight Time.Last 90 Days: 200
Experience.Flight Time.Type: 1500
ASRS Report: 554112

Person / 2
Function.Flight Crew: First Officer

Person / 3
Function.Oversight: PIC
Function.Flight Crew: Captain

Person / 4
Function.Controller: Local

Events
Anomaly.Inflight Encounter: Wake Turbulence
Anomaly.Other Anomaly: Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Flight Crew: Regained Aircraft Control
Resolutory Action.Flight Crew: Rejected Takeoff
Consequence.FAA: Investigated
Consequence.Other: Company Review
Consequence.Other: Flight Cancelled
Consequence.Other: Maintenance Action

Supplementary
Problem Areas: Airport
Problem Areas: ATC Human Performance
Problem Areas: FAA

Narrative:
AT APPROX 120 KTS, ON THE TKOF ROLL, HAD WHAT APPEARED TO BE UNCOMMANDED R RUDDER INPUT. COULD NOT KEEP ACFT ON RWY CTRLINE, SO I ELECTED TO ABORT THE TKOF. ONCE ACFT WAS STOPPED ON THE RWY, WE RAN THE REJECTED TKOF CHKLIST. NO INJURIES OR DAMAGE TO ACFT. RPTED THE APPARENT MAINT PROB AS REQUIRED. CREW CRM BTWN FLT DECK AND CABIN CREW WAS GOOD. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: CREW WAS FLYING A B757-200 ACFT. THE ACFT WAS EXTENSIVELY CHKED BY MAINT. NO PROBS COULD BE FOUND. THE ACFT WAS THEN GIVEN A COMPLETE FLT TEST. AGAIN, NO PROBS COULD BE FOUND. THE FLT RECORDER WAS REMOVED AND READ. IT SHOWED AN INSTANTANEOUS LOSS OF 26 KIAS AND AT THE SAME TIME A R TURN BEGAN. IT SHOWED NO R RUDDER INPUT, AND ONLY L RUDDER TO COUNTERACT THE R TURN. THE ACFT THEN HAD AN INSTANTANEOUS INCREASE OF 12 KIAS, WHEN THE ABORT SEQUENCE STARTED. PLT RPTED HVY ACFT WERE LNDG ON RWY 4R AT THE TIME. THE COMPANY THINKS THE ACFT ENCOUNTERED THE WAKE VORTEX OF A LNDG ACFT, WHILE ON ITS TKOF ROLL, THE FAA PARTICIPATED IN THE INVESTIGATION AND CONCURS WITH THE CONCLUSION.

Synopsis:
B757-200 CREW ENCOUNTERED UNCTLABLE R TURN ON TKOF ROLL ON RWY 4L AT EWR.